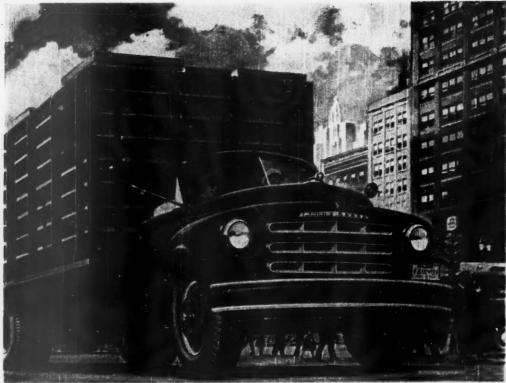
BUSINESS WEEK

WAR COSTS: Treasury
has some money to raise

A M. GRAW HILL PUBLICATION

SEPT 9, 1950



2-ton shown with 15-foot high rack body-also available on 11/2-ten chassis

New kind of truck sets new records in thrift!

ALL over the nation you hear fine reports on Studebaker trucks as low-cost performers.

Owner after owner finds that Studebaker trucks excel impressively in mile for mile comparisons of gasoline consumption.

What's more, the maintenance expense on Studebaker trucks is amazingly and consistently low thanks to a new kind of structural strength that's inherent in Studebaker's truck engineering.

Stop in at a nearby Studebaker showroom. Get clear-cut proof of the superior pulling power, staying power and earning power of Studebaker trucks on your kind of work.

Check up on the big reductions in costs that many Studebaker truck owners are effecting.

Studebaker trucks come in sizes and wheelbases for literally hundreds of varied hauling needs— 1/2 ton, 3/4 ton, 1 ton, 11/2 ton and 2 ton models.

STUDEBAKER TRUCKS

Noted for low-cost operation



First trucks with automatic overdrive! This advanced transmission, available at extra cost in ½ ton and ¼ ton Studebaker trucks, saves extra gas and checks engine weer, greatly lengthens the truck's life.



World's finest truck cub! Interior of ½ ton model shown with steering post gear shift. Enclosed steps. Wide visibility. Foot-regulated floor ventilators. Window wings. Rotary door latches. "Hold-open" door stops.



World's easiest trucks to service! Unique "lift-the hood" accessibility brings engine and ignition within easy arm's reach. No standing on a box. Instrument panel wiring is located on engine side of the cowl.



Built by father-and-son teams and other conscientious craftsmen, all the Studebaker trucks stand up amazingly, stay remarkably free from the need for serious repairs. &Studebaker, South Bend 27, Ladisma, U.S.A.

RESEARCH KEEPS

B.F. Goodrich

FIRST IN RUBBER



Photo everteey Armen Stani Chep.

Coal falls down a staircase of rubber steps

A typical example of B. F. Goodrich improvement in rubber

N those metal frames are conveyor belts that take coal from freight cars down to river barges. The coal rides the length of one belt, then drops six feet to the next, and so on down the "staircase" — made in sections so it can be adjusted when the river rises and falls.

The constant stream of pulverized coal was like a grindstone on the belt. And the six foot drops of rushing grit were shocks from which ordinary belts didn't recover. They wore out in a year, sometimes sooner. This meant constant expense for new belts, lost

time and labor for replacements.

B. F. Goodrich men were called in. They had already developed a belt especially to stand crushing impacts and rushing grit—a cord belt, so called because of its individual cords that float in rubber. When coal or rock drops on the cord belt, the cords stretch together, then flex back. The blow is absorbed by the rubber, like a cushion when you hit it with your fist.

Cord belts stand impacts 2 to 6 times better than ordinary belts, in this case are in their fifth year, already handling over two million tons of coal, as against 500,000 for the old type belts. The cost of five belts has been saved, plus over 50 man-days of labor in replacement and repair time.

Lengthening the life of industrial rubber products is everyday business at B.F. Goodrich. Product improvements like the cord belt are typical results of this constant research. Your business can benefit by calling in your local BFG distributor. The B.F. Goodrich Company, Industrial and General Products Division, Akron, Obio.

B.F. Goodrich

Bring Your Box Seat



From Iron Mine to Assembly Line, A-C Equipment Helps Build Your Automobile . . .



It takes 3.5 tons of air to make a ton of iron from ore. Dependable A-C turbo-blowers are supplying blast furnaces with these huge quantities of air at low cost. Cuts time for making sand cores from days to minutes! Allis-Chalmers dielectric core dryers eliminate timewasting steam-out, cooling and curing; improve uniformity.





Auto production is motorized at every step. From main roll drive motors in steel mills to smaller ones for machine tools, thousands of Allis-Chalmers motors serve auto makers.

PROSPER IN PUNICE!

America's strength, prosperity and good living have been paced by its rapidly expanding generation and utilization of electric power.

With You...



DRIVE IN—show starts at dark—Western, Comedy, Short or Drama . . .

Enjoy it right in your own car!

Just one more way America caters to America-on-wheels!

Credit your automotive industry—its engineers, designers and production men—for 35,000,000 cars on the road . . . for 17,000 new vehicles a day that bring you the latest in styling, comfort, utility and driving safety.

Credit assists to big producing companies like Allis-Chalmers!

Allis-Chalmers giant steel mill motors help turn fiery ingots into sheet steel. Other A-C motors drive huge body presses, thousands of machine tools, miles of conveyors. Dependable, economical power to run them all comes from Allis-Chalmers electrical generation and distribution equipment.

In fact, Allis-Chalmers assists in manufacturing almost every product of good living you can name!

ALLIS-CHALMERS MANUFACTURING COMPANY 901 : South 70th Street, Milwaukee 1, Wisconsin

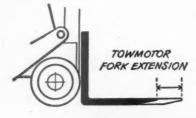
ALLIS-CHALMERS



One of the Big 3 in Electric Power Equipment— Biggest of All in Range of Industrial Products



With engines constructed especially for heavy-duty industrial use, with plenty of power to spare even for the heaviest loads, Towmotor cuts 20% to 30% from your production costs. Compare industry's fastest working fork lift truck with any other lift truck and you will see why Towmotor's rugged features make every Mass Handling job easier, faster, safer. Write for a copy of "Handling Materials Illustrated." Towmotor Corporation, Div. 2, 1226 E. 152nd St., Cleveland 10, Ohio. Representatives in all Principal Cities in U. S. and Canada.



FORK EXTENSIONS . . . another Towmotor efficiency feature

Permit a temporary extension of the regular forks for unusually large loads. Easily removed for regular handling assignments requiring standard length forks.

every handling job is easier with Towmotor MH!



FORK LIFT TRUCKS and TRACTORS

RECEIVING . PROCESSING . STORAGE . DISTRIBUTION

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BUSINESS WEEK . SEPTEMBER 9 . NUMBER 1097

twith which are combined The Athalist and the Magnine or Business : Published weakly by Medicav-Hill Publishing Company, Inc., James II. McGraw (1886-1943), Founder e Publication Office 99-129 North Bruadway, Albany, N. Y. & Editorial and Executive Offices, Advanced to the Company of the Co

STORY.

Single copies 25c. Subscription rates — United States and possessions \$8.00 a year; \$12.00 for three years. Chanda 57:00 a year; \$14.00 for three years. Fan American countries \$20 a year; \$14.00 for three years. Fan American countries \$20 a year; \$10.00 for three years. Each end as second class matter Dec 4, 1936, at the Post Office at Albany, N. Y., under Avd of Mar 3, \$187 a Printed in U. S. A. Copyright 1950 to McGraw-Hill Publishing Co., Inc.—All Habbs. ; secrete.



THIS CAR MANUFACTURER FOUND THE RIGHT ANGLE ON A NUT-SETTING PROBLEM

AN ADAPTATION OF KELLER AIR TOOLS

Time and motion studies of assembling automobile instrument panels showed one car manufacturer that he had a typical nut setting problem.

nut-setting problem.

He found that when workers were fresh on the job, the lock nuts that hold buttons to the panel were pulled too tight with hand wrenches. When workers grew tired toward the end of the day, lock nuts varied all the way from too tight to too loose. In-

spectors had to turn back many panels for rework.

By applying Keller Right Angle Nut Setters equipped with special through clearance sockets, torque on the lock nuts was kept accurate and uniform throughout the workday... because all nuts were pulled up under the same power to the stall point of the tool. The same tools were used to drive nuts over short extended shafts from the front of the panel, and over flexible cables from the back of the panel. The through clearance sockets made the tool adaptable to both jobs. Savings in workers' time and a reduction in fatigue also resulted.

Keller engineers will gladly work with your production supervisors or tool engineers to determine how Keller Tools can serve you. Keller air hoists, screw drivers, nut setters, die grinders, and chipping hammers step up production at low cost.



Air Tools engineered to industry

KELLER TOOL COMPANY, GRAND HAVEN, MICH.









THE CLUE is in the clothes. Both the girl's taffeta dress and the man's suit are rayon - the fabric made with caustic soda.

The rayon and cellophane industries must have top-purity caustic. Wyandotte is the world's largest producer of Mercury Cell Caustic, which is purer than most reagent caustic used in laboratories.

In the chemical industry, Wyandotte Caustic serves as an absorbent. an activating agent, a catalyst and as process material for hundreds of compounds.

The gasoline in your car has probably been deodorized with caustic one of its many uses in the field of petroleum. In the soap industry, caustic is an ingredient in drain cleaners. In the new "continuous saponification" method of producing soaps and detergents, highquality caustic is imperative.

Modern applications of Wyandotte Caustic are lowering costs and improving products for hundreds of other manufacturers. Are you using the most efficient grade of Caustic for your purposes? Did you know that, depending on your location, purchasing 74% Liquid Caustic in place of 50% could save you onethird of your freight charges? Why not consult our Technical Service Department?

Wyandotte Chemicals Corporation Wyandotte, Mich. • Offices in Principal Cities





Wyandotte Chemicals Corporation is one of the world's major producers of soda ash, caustic soda, bicarbonate of soda, chlorine, dry ice and calcium carbonate. Wyandotte produces glycols and related compounds, certain aromatic sulfonic acid derivatives and other organic intermediates. Wyandotte is also the world's largest manufacturer of specialized cleaning compounds for business and industry.

Highlights In This Issue

THE REARMAMENT DRIVE

It dominates BUSINESS WEEK'S pages this issue. Note these aspects:

The Logistics of It

· Almost unknown to the public, a new group, the Joint Secretaries Board, is doing the basic supply planning. P. 25

The Men It Takes

• There are enough warm bodies to do the job, it appears, but needed skills are P. 19 already short.

The Controls It Takes

• A roundup of just what authority Congress gave Truman. P. 30

And Who Administers Them

A preliminary Washington directory
 Cinductrial controllers. P. 33

How It Will Be Paid For

• Treasury hopes taxes can carry a big-ger share this time than in World War II. P. 100

Out of Whose Pocket

• The new tax bill is now nearing final

Disarming the Deficit

· This week's anti-inflation move: consumer credit regulations.

The Country Feels the Impact

· Detroit and Wichita, for instance. Big new war jobs have been dumped on both cities.

THE DEPARTMENTS

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how <u>now</u> brown cow?

If you hear "BOOS" mixed with "MOOS" around the American barnyard, you'll know old Bossy's heard she's fast becoming a single-barreled blessing.

Her milk's still wonderful. But as a fertilizer factory, Bossy's losing her touch to outfits like our subsidiary, Phillips Chemical Company. Right now our fertilizer folks produce more nitrogen for fertilizer than the next 3,000,000 cows you meet.

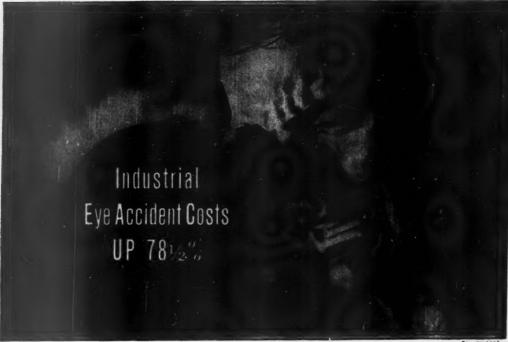
Remember that. Remember Phillips is a new source of low-cost tonnage nitrogen. Write us for contract prices and deliveries of Phillips 66 anhydrous ammonia, ammonium sulfate, ammonium nitrate and nitrogen solutions. K. S. Adams, President, Phillips Petroleum Company, Bartlesville, Oklahoma.



PHILLIPS PETROLEUM COMPANY
Bartlesville, Oklahoma

WE PUT THE POWER OF PETROLEUM AT YOUR SERVICE





*SINCE 1939

While other high costs are "leveling off" Here's one you can cut to INSIGNIFICANCE

NOW!

You don't have to wait for favorable market conditions to cut industrial eye accident costs. The costs of eye accidents are always high—but the cost of the protection that prevents *98% of the injuries is always infinitesimal in comparison.

Typical Case: A machinery manufacturer saved \$42,000 in annual eye accident costs after installing

an AO eye protection program. A check of your own eye injury costs and similar positive action can assure important savings for you. Ask your nearest AO Safety Products Representative for complete details.

*According to the Society for the Prevention of Blindness 98% of industrial eye accidents are prevented when shop workers wear safety reperies.



iouthbridge, Massachusetts Branches in Principal Cities

American O Optical som

Safety Preducts Division

BUSINESS OUTLOOK

BUSINESS WEEK



Construction hit another new peak in August, but it isn't going to go much higher. There are several reasons:

Rising costs and shortages of building materials are big obstacles.

Tighter credit rules will put a very mild brake on housing.

The cost of running a war, plus scarcity of materials, will gradually cut federal public works outlays.

Winter weather, as always, will exercise its seasonal downpull.

Both residential and nonresidential building have been hanging up new records for just about a year now.

Value of work put in place during August on all kinds of construction is estimated at \$2.7-billion. That's about \$800-million above a year ago. It was a new high for the fourth month in a row.

Work on private houses is put at \$11/4-billion in August. That's almost double a year ago—and also the fourth record in succession.

Public construction—local, state, and federal—has risen to a point where some cutback can be taken without too much pain. Value of work put in place in August was \$718-million, for the eight months, \$3.6-billion—both new postwar records by comfortable margins.

Obstacles to the building boom pop up almost anywhere you look.

Birmingham's First National Bank has virtually stopped making loans for home building. It's waiting for the <u>war situation</u> to clear. Only deal it would like: one where all the materials are in a warehouse.

Black markets flourish in Dallas." Wallboard, very hard to come by through dealers, is plentiful at 50% over the market. Cement, quoted at 68¢ a sack, is hard to find (though black marketers have all you want at \$1.25).

The Dept. of Commerce sees shortages lasting through October.

Meanwhile, skyrocketing <u>prices</u> have caused a New Jersey builder to cut 1950 plans from 650 one-family houses to 226.

Although lumber production in 1950's second quarter was the highest for that period in 30 years, Engineering News-Record describes prices as "running wild."

Manufacturers' basic costs now are the highest they have ever been.

The new rash of <u>wage boosts</u> carries hourly pay to new highs, of course. Growing overtime also fills weekly pay envelopes fuller.

Not as yet generally realized, <u>raw materials</u> are at a new high. Within the last few weeks, both spot market and wholesale price indexes compiled by the Bureau of Labor Statistics have topped their 1948 peaks.

Since the Korean affair, the fast-moving spot index of industrial materials has risen almost 25%; the more sluggish wholesale list is up 5%.

Two significant price rises of the last few days: copper and lead.

Lead now has been marked up to $15 \not\in$ a lb.; not long ago, it went begging at $10 \frac{1}{2} \not\in$. But it's still far below the postwar high of $21 \frac{1}{2} \not\in$.

Copper now is generally quoted at 241/2¢ a lb., up 2¢ a lb.

It's still a funny market, though. Efforts to remove the import tax

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK SEPTEMBER 9, 1950 of 2¢ a lb. have been snowed under in this session of Congress. So, with demand far in excess of U. S. output, copper imports are expected to be booked at a figure of $26\frac{1}{2}¢$ a lb.

These prices, plus federal bonuses, should spur marginal output.

Manufacturers' inventories are headed down after a three-month rise, the National Assn. of Purchasing Agents reports.

As a matter of fact, latest government figures indicate that there wasn't much gain in stocks even in July. The total, valued at \$32-billion, was up only a matter of \$300-million over June.

Allowing for prices, the gain in physical volume would be very slight.

Order backlogs of the nation's factories continue to rise.

Take July. The value of manufacturers' incoming orders was \$22.8-billion, says the Dept. of Commerce. And, though value of shipments has been rising sharply from last year's lows, the figure fell \$2.8-billion short of matching new orders.

Evidence accumulates that the first rush of scare buying is over.

Department store sales in the last week of August changed only a mite from a year earlier.

Interestingly enough, even in July when the buying boom was reaching its peak, stores didn't have to draw down stocks heavily.

The Federal Reserve Board notes only a 3% inventory decline from June to July (after allowing for seasonal factors). At the same time, dollar value of stocks remained about 4% above the same date last year.

The sales rush, however, resulted in a very sharp rise in orders placed by the big stores with their suppliers.

Much of the consumer buying spree was on the cuff. The only surprise in that is, perhaps, the actual extent of borrowing.

Total consumer credit shot up by \$660-million in July alone.

That's the biggest rise ever recorded except during Christmas. The November-December gains in 1947 and 1949 were larger, and the bulge for 1948 was almost as big.

The total now is above \$20-billion for the first time (page 24). That's up \$4.1-billion in a year, or almost exactly 25%. And it's more than $1\frac{1}{2}$ -billion over the seasonal high at the close of 1949.

Here's how plentiful jobs at high wages affect the labor force:

A year ago, with jobs scarce, 63.6-million people had jobs or were hunting them. Now, with jobs plentiful, the figure is 64.9 million.

That's about double the normal annual rise in the labor force. Even so, unemployment is more than a million under last year.

Business failures will be very much lower in the months to come. Total defaults in the last week of August, in fact, were the smallest save once since the opening weeks of 1949.

That's a byproduct of the remarkably high level of business.

But here's a byproduct of war: more voluntary liquidations. Men giving up private pursuits to enter—or reenter—the services will be many.

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TRAILMOBILE

WHERE THE LOAD IS CONCENTRATED





Sub-frame members made from OTISCOLOY sheets carry the load in Model AA Trailmobile

The entire payload and body weight of a semi-trailer are concentrated at two points—the "nose" and rear axle sub-assemblies. Trailmobile cuts deadweight and ensures the greatest resistance to fatigue in these important points, by using J & L Oriscoloy high-tensile sheet steel.

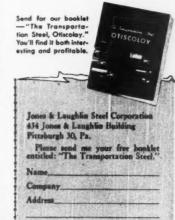
The result:—Model AA trailers possess not only great strength, endurance and safety but are able to haul maximum payloads.

OTISCOLOY can be stressed 25% higher than mild steel. This permits the use of lighter weight sections and reduces deadweight. In addition, OTISCOLOY's high resistance to fatigue assures safety and endurance in sub-frame assemblies where

stresses from road shocks, twisting and jack-knifing are severe. Finally, OTISCOLOY has greater abrasion resistance than mild steel and 4 to 6 times greater corrosion resistance.

You don't have to invest in new fabricating machines to take advantage of OTISCOLOY. Trailmobile has found that high-tensile OTISCOLOY can be easily formed on the same equipment used to work mild steel. The trunnion cross member on the Model AA is a good example. Made from \(\frac{3}{16}\)'' sheet, this member has four 90 degree bends all formed on a brake press to a \(\frac{5}{16}\)'' radius.

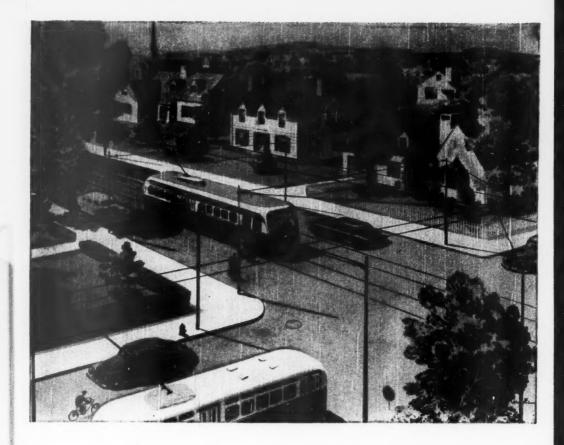
If you manufacture or use transportation equipment you know how important it is to cut deadweight while assuring long service life. Why not find out how you can do it the easy way—with J & L OTIS-COLOY—the Transportation Steel?



JONES & LAUGHLIN STEEL CORPORATION

From its own raw materials, J&L manufactures a full line of carbon steel products, as well as certain products in Otiscolor and JALON discessile steels).

PRINCIPAL PRODUCTS: HOT ROLLED AND COLD FINISHED BARS AND SHAPES • STRUCTURAL SHAPES • HOT AND COLD ROLLED STRIP AND SHEETS • TUBULAR, WIRE AND TIN MILL PRODUCTS • "PRECISIONBILT" WIRE ROPE • COAL CHEMICALS



Transit Progress Paces Civic Progress

TRANSIT PROGRESS DAY (September 11) turns the spotlight on the remarkable achievements of a branch of America's great transportation system that is often overlooked—the local transit lines,

Operating day and night, in all sorts of weather, these lines are the "Seven League Boots" of millions of suburbanites. They bring jobs and shopping centers within a few minutes journey of distant homes, permit cities to grow out instead of up. The magnitude of the transit job is suggested by the performance figures. Surface, subway and elevated lines, trolley coaches and motor busses carry over 22 billion passengers annually an average of over 150 rides a year for every individual in the nation!

In transit lines—as on the railroads—Westinghouse brakes play an important role. The subways, the elevated, and many of the trolley coaches and streamlined trolley cars, rely on Westinghouse Brakes to combine speed and dependability of service with top safety and comfort for patrons.

In transportation, the name "Westinghouse Air Brake" means more than a single product. It stands for a wide range of power braking systems—pneumatic, electro-pneumatic, all-electric, or their blends with dynamic—each specialized to do a better braking job in some specific application. A sustained program of research and development assures that brake progress will keep continuously abreast of transportation progress.

W Westinghouse Air Brake Co.

FIGURES OF THE WEEK

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	§ Latest Week	Preceding Week	Month Ago	Year Ago	1941 Averag
Business Week Index (above)	*219.2	†216.8	219.8	185.1	162.
Dusiness Week index (above)				20712	202
PRODUCTION					
Steel ingot operations (% of capacity)	98.0	97.1	99,9	84.2	97.
Production of automobiles and trucks	188,264	1179,042	175,572	146,039	98,23
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands) Electric power output (million kilowatt-hours)	\$45,977 6,459	\$40,226 6,346	\$40,378 6,247	\$25,504 5,544	\$19,43
Crude oil and condensate (daily average, 1,000 bbls.)	NA.	5,699	5,640	4,813	3,84
Bituminous coal (daily average, 1,000 tons)	1,817	+1,880	1,793	1,314	1,689
TRADE					
Miscellaneous and l.c.l. carloadings (daily average, 1,000 cars)	80	81	79	75	. 8
All other carloadings (daily average, 1,000 cars)	59	61	62	50	5
Money in circulation (millions)	\$27,042	\$26,963	\$27,000	\$27,389	\$9,61
Department store sales (change from same week of preceding year)	+16%	+12%	+42%	-1% 174	+179
Business failures (Dun & Bradstreet, number)	143	170	100	4/4	44
PRICES (Average for the week)					
Cost of Living (U. S. Bureau of Labor Statistics, 1935-1939 = 100), July. 172.5			170.2	168.5	105.
Spot commodity index (Moody's, Dec. 31, 1931 = 100)	470.0	469.7	458.9	344.9	198.
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100) Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	297.3 360.8	296.0 359.1	279.1 349.0	227.5 301.3	138.
Finished steel composite (Iron Age, lb.)	3.837€	3.837€	3.837€	3.705€	2.396
Scrap steel composite (Iron Age, ton)	\$40.58	\$40.92	\$39.17	\$23.92	\$19.4
Copper (electrolytic, Connecticut Valley, lb.)	23.788€	22.521¢	22.500¢	17.625¢	12.022
Wheat (No. 2, hard winter, Kansas City, bu.)	\$2.21	\$2.19	\$2.22	\$2.13	\$0.99
Sugar (raw, delivered New York, lb.)	6.25∉	6.25€	6.24€	5.98∉	3.384
Cotton (middling, ten designated markets, lb.)	39.79¢ NA	†38.61¢ \$2.85	37.73¢ \$2.55	30.35¢ \$2.05	13.94 ₆ \$1.41
Wool tops (Boston, lb.) Rubber (ribbed smoked sheets, New York, lb.)	51.50¢	54.40e	59.85¢	17.67€	22.16
	2	2 11 104	- 11074	271074	221104
FINANCE	147.2	1.477.4	145.5	191 -	go -
90 stocks, price index (Standard & Poor's Corp.)	147.3	147.4 3.22%	145.5	121.6	78.0 4.33%
High grade corporate bond yield (Aaa issues, Moody's)	3.21%	2.61%	3.25% 2.61%	3.38% 2.60%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average)	11-11%	14-11%	14-11%	14-11%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	11-11%	14-13%	14-11%	11%	1-1%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	48,351	48,561	48,264	46,753	1127,777
Total loans and investments, reporting member banks	67,933	68,176	67,847		++32,309
Commercial and agricultural loans, reporting member banks	14,187	14,512	14,022	12,965	116,96
Securities loans, reporting member banks.	2,594	2,296	2,610		++1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks	35,154	34,894	35,496	- 1.80.0	++15,999
Other securities held, reporting member banks	6,048 540	6,176 800	5,989 860	4,981	114,303
Total federal reserve credit outstanding.	18,979	18,883	18,762	1,175 18,225	5,290 2,265
Preliminary, week ended Sept. 2.			Week" on		
++Estimate (BW-Jul.12'47,p16). +Revised.	NA-Not	vailable at p	vess time.		on request.

Announcing

PERSONAL
MEDICAL DISASTER
INSURANCE

A New Kind of Group Insurance of Special Interest to Business Executives

What happens when one of your people suffers a serious accident or illness — polio, heart or cancer? Most companies have only a limited insurance plan to meet ordinary medical costs. But when the treatment for accident or illness continues for months . . . when medical and hospital bills pile up . . . this is the time when insurance is most urgently needed. Catastrophic illness causes most of the critical personal financial crises.

To meet such personal disasters, Liberty Mutual has led the way with a new group plan. To keep costs low and to tie in with other limited plans, a deductible feature is included. Tested in two nationally prominent concerns for nearly two years, this new plan is now ready to fill the gap in the insurance programs of most companies. You have several options as to the extent of coverage desired. Here is an example of how it works:

We pay 75 percent of medical expenses in excess of \$300 for any one non-occupational illness or accidental injury. We pay up to \$5000 in each case for medical, surgical, hospital or nursing services, x-ray examinations and treatments, laboratory tests, anesthesia, drugs, medicines and all other therapeutic services and supplies. Our plan covers the higher charges so often assessed against persons with substantial incomes, and may also be written to cover dependents. Most companies already have a limited accident and sickness plan to cover the first \$300 not paid under this policy. Because of the \$300 deductible feature and because the insured pays a

part of the remaining expense in each case, the cost of our plan is moderate.

Hailed as a practical contribution to group insurance, this plan has caused keen interest among business executives. The Chamber of Commerce of the United States has recently published an article describing it. We will gladly send you a reprint, together with our new booklet, "How to Insure Against the Cost of Personal Medical Disaster." Please write Liberty Mutual, Group Accident and Health Department, 175 Berkeley Street, Boston 17, Massachusetts, or, if on West Coast, 216 Pine Street, San Francisco 4, California.



We work to keep you safe...by providing protection for business, home and car owners...by removing the causes of home, highway and work accidents...by relieving the pain and financial burden of accidents by prompt and friendly handling of claims.

WASHINGTON OUTLOOK

WASHINGTON BUREAU SEPT. 9, 1950



Washington now will look over your shoulder as you make your decisions on production, new plant and facilities, wages, prices.

It won't interfere much—at the start. But later, in a matter of months, you'll feel the finger of government tapping you.

Truman says his policy is to keep controls moderate. The big question, of course, is whether he can stick with this and still achieve the twin aims of diverting more production to arms while holding inflation in check.

Many of his advisers think it can't be done. And there's backing for their view among businessmen who are in on government plans. Here's why:

Inflation is off to a head start, even before the new defense demands begin to cut civilian goods and put more dollars in consumers' pockets.

Wages are chasing prices up. And the new contracts tie future raises to living costs, which means more spiraling.

So the prospect is prices will keep on up. Many Truman economists figure living costs will be 5% above Korea by the end of the year, then up another 5% by spring. That's a rate of about 1% per month, which is rapid.

Another bulge in the defense program is ahead. Before Korea, the plan was to spend \$15-billion on our own military, plus stockpiling of materials and arms aid. Since Korea, the figure has climbed to \$30-billion-plus. Now the plan is to add another \$10- to \$15-billion, either this fall or in January. That will be on top of everything else and, of course, will require a still bigger diversion of production from civilian to military needs.

A \$15-billion "inflation gap" by next midyear is forecast. That's how much civilian demand is expected to exceed the supply of goods and services.

Still higher taxes will sop up part of it—maybe half. But Truman's economists argue that the remainder will have to be "neutralized." That means controlling it out of the market in some way, before it pushes up prices.

So there will be constant pressure to expand controls: Switch from lenient to harsh terms on consumer credit; back up defense priorities with tight material allocations; order cutbacks in civilian output; and, eventually, go to price and wage controls.

Controls will run two to three years at a minimum. That's how long Truman's advisers now figure it will take the production machine to grow up to the extra defense needs and again meet civilian demand without strain.

But the big defense load will continue longer. Watch for Washington to hammer home the idea that we must support a costly war machine far into the future, even if Russia makes no further hostile moves.

Truman is shopping for a mobilization coordinator who will operate as his righthand man—be a sort of Jimmy Byrnes. His job will be to ride herd on controls and see to it that Commerce, Interior, and Agriculture don't get their lines snarled.

Gordon Gray may get the spot. He is the ex-Secretary of the Army,

WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU SEPT. 9, 1950 and now is making a special report to Truman on foreign economic problems (page 123).

A word of caution on the antitrust laws: There's no automatic suspension when controls come. The government can grant exemptions when it wants voluntary agreements from industry on such things as prices or production cutbacks. But remember that any such agreements must be under government supervision and must have the approval of the Justice Dept. Otherwise, there will be trouble.

Congress may balk at recessing. Members want to go home to politics, all right. But they also want to be able to rush back here and complain if they don't like what Truman does on controls. This may keep the session going—but with an agreement that no votes will be taken without advance notice to members at home. Democratic leaders don't like the idea. They see it as a slap at Truman.

Republican hopes for a comeback this fall are high. Thus far, the Democrats haven't evolved a politically safe "out" on Korea. This is the issue on which the GOP counts to gain House and Senate seats.

The Senate races will be especially hot, since the Senate has a hand in foreign policy. Here's the way key contests shape up at this stage:

In New York, the Republicans have an even chance to unseat Sen. Lehman with Lt. Gov. Hanley, now that Governor Dewey will run for reelection at the head of the GOP ticket.

Connecticut seems sure to return one of its two Democrats, McMahon. But Benton has a tough fight and may be replaced by a Republican.

Pennsylvania should score for the Republicans, with Gov. Duff winning over Sen. Myers, Truman's whip in the Senate.

Ohio still gives Taft the edge. But the outcome isn't a sure thing yet. The Democrats, with labor's help, are doing a thorough organizing job.

In Indiana, Republican chances of winning with Capehart are improving.

Missouri seems likely to give Donnell's seat to the Democrats.

Illinois is a toss-up. Some of Democratic leader Lucas' backers report he has no more than a 50-50 chance to beat ex-Rep. Dirksen.

In Iowa, Hickenlooper looks safe for the Republicans.

Colorado is close, with Rep. Carroll threatening to unseat Sen. Millikin, the GOP tax spokesman in the Senate.

California is leaning to Rep. Nixon, House sponsor of the anti-Red bill, over Rep. Helen Douglas, Democratic liberal. The contest is for Sen. Downey's seat.

It doesn't yet add up to any GOP sweep. But with the Democrats split, even moderate Republican gains will mean tough going for Truman, certainly on domestic issues and perhaps on foreign policy.

A coalition cabinet after elections already figures in speculation. The idea behind it is this: A close election here might create doubt abroad on Truman commitments—unless the Republicans have a hand in making top policy.



he Minneapolis & St. Louis Railway again salutes the mighty Soy Bean industry, which in 1950 is playing a greater part than ever before in agricultural and industrial progress. The American Soybean Association, founded in 1920, is holding its 30th annual convention August 28-29-30 in Springfield, capital of America's No. 1 Soy Bean State.

As an important carrier of Soy Beans and the many products made from this modern "Miracle Crop," the M. & St. L. recognizes the contribution of Soy Beans to farm and business prosperity in the Great Midwest. This contribution is most striking in the four states served by

The Minneapolis & St. Louis Railway

In 1949, Illinois, Iowa, Minnesota and South Dakota harvested 5,194,000 acres of Soy Beans, half of the United States' total. They produced 124,165,- 000 bushels or 55 per cent of the country's crop of 222,305,000, second largest in history. Illinois harvested 82,602,000 bushels, the all-time record for any state; Iowa, 28,778,000 bushels; and Minnesota, 12,408,000. The 1950 acreage exceeds that of 1949 and an even bigger crop is forecast.

and an even bigger crop is forecast.
Soy Bean is called the "Miracle Crop" because of its manifold uses and the rapidity with which it has become a great and profitable factor in American farming.
The M. & St. L., specialist for 79 years in transportation for agriculture, networks some of the richest Soy Bean growing areas and directly serves five large

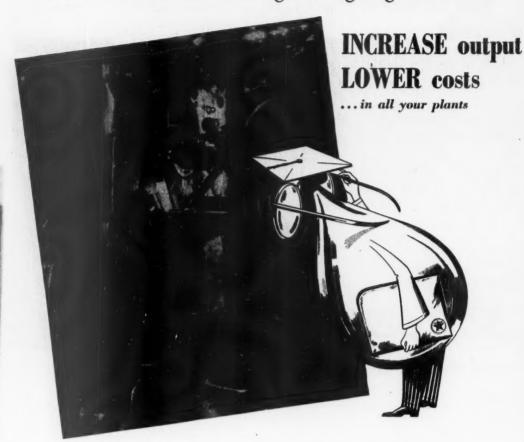
processing plants. To Soy Bean producers and processors, the M. & St. L., a modern, Diesel-powered Railway, offers the same Fast Dependable Freight Service it has provided since 1871 for other products of agriculture and industry.

Diesel Locomotives now power all M. & St. L. Freight Trains

The Minneapolis & St. Louis Railway

Traffic Offices in 36 Key Cities

Here's how Oil with an Engineering Degree can...



When skilled Texaco Lubrication Engineers analyze plant operations and make recommendations . . . they are offering Oil with an Engineering Degree.

Armed with years of cost-saving experience gathered from every field of industry, these specialists will do just that in all your plants. Then, you get the right Texaco lubricant in the right quantity, in the right place, at the right time (from the nearest of the more than 2,000 Texaco Wholesale Distributing Plants).

For example: on slotting saw (above) after recommendation and use of a Texaco

cutting oil, four regrinds in 24 hours were reduced to three. On the same machine cutoff tool life was extended from two to six hours. In addition to these worth-while sawings in regrinding costs, reduction in downtime enables the machine to produce an extra 875 pieces per 8-hr. shift. So – increased production and reduced tool maintenance add up to lower unit costs.

Oil with an Engineering Degree can help you effect sayings in all your plants. Call or write the nearest Texaco Wholesale Distributing Plant or The Texas Company, 135 East 42nd Street, New York 17, N. Y.

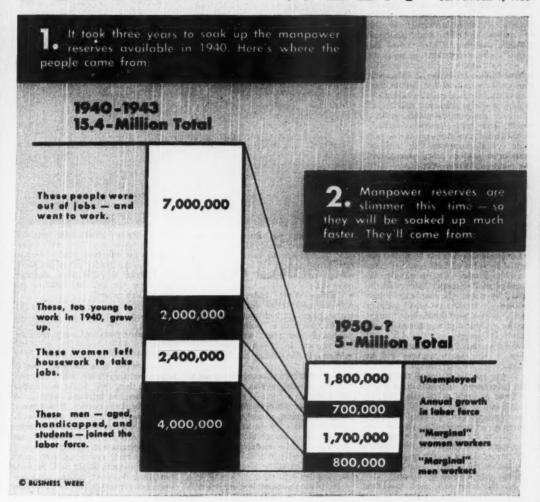


The Texas Company

More than 2000 Texaco Wholesale Distributing Plants in all 48 States — to serve all your plants.

BUSINESS WEEK

NUMBER 1097 SEPTEMBER 9, 1950



Manpower: No Big Reserve, But Enough

The company personnel officer will find it hard to believe—but there really is no critical labor shortage in the offine.

That's because there is labor and labor. Some of it is skilled. More of it is unskilled, marginal, and just warm bodies. But with training, even warm bodies can do a competent job under the pressure of a war economy.

• Tight Spot-True, skilled labor is tight and getting tighter. By now, most experienced workers have been drained from the pool of active job seekers. Less than 10% of the remaining unemployed are in skilled categories.

Nonfarm employment is at a record peak. During July, it shot up by 1.5 million to a new high of more than 54 million. Unemployment dropped from 3.2 million to 2.5 million. Allow for an absolute minimum of unemployed for a few days between jobs, and that leaves only about a 1.8-million potential increase in employment with the present labor force.

Thus to get new workers, industry must turn to-and train-the inexperienced, the marginal, and the young.

These are the people who will have to become part of factory payrolls if production is to reach the heights pictured by the economists. The housewives, the aged, the handicapped, the students, and the unemployed make up our only specific manpower reserve—a force of five-million people.

force of five-million people.

On Paper-Beyond this, there are other reserves, but their availability

brings you into the realm of theory. Conceivably, if you applied World War II figures to 1950, factories could add about four-million workers to their crews through shifts of people from nondefense work to war jobs. Service industries could lose one million to the factories. Trade could disgorge close to two million; agriculture might sweat out 500,000. Another 500,000 could be picked up from miscellaneous segments of the economy.

• Nine Million for Hire-Together with the specific reserve of five million, factories could thus conceivably add ninemillion people to their total work force. Of these, three million, more or less, would have some experience. They would be the men and women who put aside overalls for nonfactory work-or housekeeping-after peace shut down the plants of World War II.

Women probably wouldn't start working until unemployment sank close to its practical limit. Last time, they delayed coming onto the labor market until the draft had left a vacuum in the supply of male workers, and low rates of unemployment had cut competition

· Longer Hours-On top of all this potential work force, there is still another invisible reserve. This is simply the number of "workers" that could be added by raising the number of hours worked. It involves no actual addition to the factory work force, but it might be the equivalent of as many as 11-million skilled people.

• What's the Need?-The question then is how many workers will be

needed.

If you ask the statistical agencies of the government, they just don't know.

Some government officials, who calculate on the basis of a 10% war, figure the extra load can be carried by adding another 24-million to three-million workers to the nonfarm work force. At the same time, these officials estimate the armed forces might take as many as one-million people away from industry; they have to be replaced.

So the manpower need could run close to four-million people.

• Stopper-It could, that is, if there were enough factories and materials to put them to work.

That's the catch.

When the war contracts start rolling, a lot of companies will replace civiliangoods production with war goods. But they won't add new workers. They will simply use their same crews, work them for longer hours. That's where the invisible reserve comes in.

In the year after Pearl Harbor, the number of hours worked in durablegoods manufacturing went up from an average of 42 hours a week to an aver-

age of 46.

In July of this year, the average work

week for durable-goods industries was 41 hours. An immediate rise in the work week, to parallel World War II experience, would have the effect of adding more than 10% more workers in manufacturing-or about 11 million.

Besides this, there are around onemillion persons now working part time who would like to have full-time employment. As business accelerates even more, they will go on full-time schedules. Between the two-long hours and full time-industry might make up 21 million of the four-million workers it

• Materials Trouble-Actually, any brakes on output seem likely to come from lack of materials rather than from a shortage of manpower.

Last time, it took three years to expand industry enough to soak up the labor reserves that were available at the beginning of the war. And even with smaller reserves and a part-way war, the process won't be an overnight

It takes time to expand production especially when business is already running all-out. For instance, steel increases planned by 1952 would add only 2% a year to capacity. While this basic capacity is being boosted, workers can be trained in hard-to-acquire skills.

• Training-When industry operates with the safety valve tied down, training programs get heavy emphasis. During the last war a "normal" training period of four years was telescoped into two-year to 21-year periods.

• Warm Bodies-What it all adds up to is this:

There is plenty of manpower around, but it's mostly in the form of raw material

That means training. With demand for goods shading all past records, manufacturers have to boost production. And as the ranks of the unemployed get thin-as they are doing already-in-dustry will revive World War II methods of getting labor: pirating, upgrading, in-plant training.

Legislation pending in Congress now. would revive the Labor Dept.'s trainingwithin-industry programs. Some companies have already begun their own training programs: In San Diego, Solar Aircraft is starting a class for women welders; General Motors is training welders for tank production at Cadillac; and Alcoa has started training coremakers and molders.

• Mobility-One postwar development, however, backfires on full labor utilization: industry pension plans.

In the jargon of the professional economist, labor is becoming "relatively immobile." There has always been a tendency for workers to resist moving from one area to another. Now it is likely to be stronger.

Autos Hit Peak

Detroit expects third-quarter production of 2,350,000 units for an all-time record. But it may be the last burst.

Detroit's auto plants are whirring with their all-time greatest burst of production. It may turn out to be the last such burst for a long time. But that isn't slowing the swiftly paced

assembly lines today.

The third quarter of 1950 is well on its way to a record production level. Unofficial estimates in Detroit this week are that the industry will roll out 2,350,000 cars and trucks by the time the quarter winds up at the end of September. That figure-including all plants, U.S. and Canadian-would handily top the previous mark of 2,-215,819 cars and trucks set in the second quarter of 1950.

• 1929 Mark-In 1929, the top year

until postwar times, the highest quarterly figure was 1,867,485 units. That was the only time until 1949 that more than 1,600,000 assemblies were put together in any three months. Since then, the level has stood in ex-

tremely high ground.

First-quarter 1	949							1,452,292
Second-quarter	1949						٠	1,700,760
Third-quarter	1949.							1,939,852
Fourth-quarter	1949							1,456,005
First-quarter 1	950							1,734,467
Second-quarter	1950							2,215,819

There never was anything like it before, and there likely won't be again for a long, long time. Right ahead, after this quarter, the total will begin to be thinned by changeovers to 1950 models. Manpower-After that, manpower shortages are expected to intervene. And the first of the arms-induced materials shortages may appear.

Lead, nickel, and copper may prove short before steel. Right now, the auto companies don't see military steel procurement getting in the way. By early next year, that picture may change.

· Everybody's Buying-Who's taking the new cars and trucks? Everyone who can get his hands on them, say the auto companies. They report that demand is uniform from coast to coast in most models and price classes.

The market was just beginning to show signs of softening in June when the Korean crisis came along. Now field stocks are bare at most points. Expectation of higher prices on 1951 models caused by recent wage increases will be a sales shot in the arm from here on.

Does today's abnormal production throw a shadow on the size of future markets? Auto firms think not.



CBS PRESIDENT Frank Stanton seems certain victor after long fight as . . .

CBS Gets the Nod on Color TV

Federal Communications Commission's tentative decision comes as shock to inclustry because system is incompatible. But FCC says it is thinking of future set owners rather than present ones.

The U.S. television industry got the surprise—and shock—of its young life last week. After months and months of hearings on color TV, Federal Communications Commission handed down a tentative decision approving Columbia Broadcasting System's color system.

• Compatibility—The industry guessed wrong on whom FCC considered most important—present TV set owners or future owners. Perhaps the biggest flaw in the CBS color system is that it is "incompatible"—not one of the seven-million sets now in the hands of owners can even get the color pictures in black-and-white without an expensive adapter. The reason is that commercial TV has 525 electronic lines on the tube face for every complete "frame" (picture). The CBS color system has only 405 lines per frame, has twice as many frames per second (BW—Apr.1'50.p19).

The two other major contenders in the color fight-RCA and Commercial Television, Inc.-made the most of this barrier at the hearings. Both got color pictures into the \$25-line pattern.

"Informed" guesses were that FCC would either (1) choose a compatible system—even though the picture was not the best; (2) send everyone back to the laboratory to bring up something

better; or (3) approve all systems, let the public decide.

• For the Future—But FCC figured its responsibility to the public somewhat differently. In its announcement, it says that while compatibility is, of course, desirable, it is too high a price to pay for color at this time. It would be only fair to the 40-million future set owners to pick the highest quality color system now.

Almost everyone agrees that the quality and stability of CBS color is higher than any other. To FCC, that was a far weightier factor in the decision than compatibility.

• Squeeze Play-Regardless of motive, industry reaction to FCC's announcement so far has been resentful-partly because it thinks that FCC has caught the industry in a squeeze play.

the industry in a squeeze play.

Specifically, FCC has asked the TV set makers if they will agree to make sets which will receive both present black-and-white telecasts and CBS color telecasts in black-and-white. (To get color, the set owner will have to add a color tube or a color wheel at his own expense.) If they do agree to make such sets, the commission will postpone its final decision on color. If they refuse to make such sets, FCC will

adopt the CBS color system as final without further delay.

FCC explains its seemingly cavalier approach this way: If enough manufacturers agree to make "a great majority" of receivers with the so-called "bracket standards," then "we will be in a position to postpone a decision." But if they don't agree, "the commission will not feel free to postpone a decision, for every day that passes would aggravate the compatibility problem."

• Industry Moves—Early this week, the

• Industry Moves—Early this week, the industry still hadn't recovered enough of its balance to indicate what it would do. Some authorities guessed that it would probably make at least some sort of token promise to meet the FCC request. One reason for this belief is that the FCC announcement is not a final decision. It gives other companies three months to present a system that it feels would be better than that of CBS. Most authorities feel that the chances of a better system coming up by then are pretty slim, and that therefore CBS is in.

• Driver's Seat-Meanwhile, CBS is certainly in the driver's seat, at least for the time being. President Frank Stanton says that CBS won't manufacture sets, but will license other manufacturers to produce its color equipment. Already, it has licensed Westinghouse and Bendix to make receivers, International Telephone & Telegraph to make transmitting equipment, and Remington Rand to make equipment for industrial TV equipment. As things stand, CBS can collect a royalty on sets made in accordance with FCC request. • Higher Cost-There's little doubt that sets able to receive both the 525line frames of present commercial tele-casts and the 405-line frames of CBS will cost a lot more than present blackand-white sets. TV set makers, say some industry people, may be reluctant to go into such a deal.

 When?—CBS claims that 30 days after it gets a final O.K. from FCC, it will go on the air in New York with 20 hours of color telecasting per week.

There's only one hitch: There won't be any audience.

• Mobilization—The biggest problem of all is one which is not in the hands of the FCC, CBS, or the industry. Manufacturers are already asking this question: How can we make more complex sets when we can't get enough materials to make present black-and-white sets? In other words, mobilization might easily make the whole color question purely academic.

Meanwhile, the industry still has no answer on the question it's really most interested in—the freeze on new TV broadcast stations. Next step is the hearings on frequency allocation FCC will start in October. A final decision is at least as far away as next summer.



WHEN A PINEAPPLE plantation migrates, first step is to cut off fruit tops for seed material. Scene is the island of Maui.



SEED TOPS stuffed in bags start a 95-mile truck and plane trip to Kohala Sugar Co. plantation on the "Big Island."

Pineapple Moves in on Hawaii's Sugar

Is the pincapple industry going to knock sugar-growing out of its centuryold position as Hawaii's top agricultural enterprise? Hawaiian businessmen are putting important money on the challenger.

 Sugar Land—In land-scarce Hawaii, more acres are being shifted from sugar to pincapple production:

• Hawaiian Pincapple Co. (Dole brand) spent \$10-m:llion for 5,500

pineapple acres, 2,500 of which will be taken from sugar.

• Kohala Sugar Co. is laying out

 Kohala Sugar Co. is laying out \$250,000 to make a test pineapple planting on the so-called Big Island, where pineapple hasn't been grown for 25 years.

Sugar has been Hawaii's No. 1 agricultural product since the early 1800s. U.S. Dept. of Agriculture figures for 1948 show that Hawaii leads all U.S. cane and beet areas in sugar per acre, in wages paid, and in output per manday.

Further, Hawaii's sugar tonnage is climbing close to the million-ton-a-year mark.

• Troubles-But that's only one side of the coin. Here's the other:

The International Longshoremen's & Warehousemen's Union (CIO) has been raising cane in the sugar fields,



NEW HOME PREPARED. This machine furrows, fertilizes, and mulches sugar acreage being turned over to pineapple.



JOURNEY'S END. Sacks of tops drop beside the newly dug furrows where they will grow.



AGS ARE STOWED aboard plane which will carry them to the "Big Island" in 2-hr. round trips. Each trip carries 8,000 lb., just enough ops for Kohala's workers to plant before the next trip. Nearly 4.4-million tops will be carried.

literally and figuratively, ever since World War II. Unionization has just about doubled wages. Many Hawaiian sugar plantations are finding it hard to compete with U.S. areas.

• Fully Unionized-Pineapple, on the other hand, is fully unionized, gets no government supports, and is thriving.

The minimum pincapple wage is \$1.01 an hour, compared to 80¢ in sugar. In 1949, pincapple produced \$75-million for Hawaii on 68,000 acres. Sugar brought in \$112-million, including government benefits on 213,-000 acres.

There's no foreseeable danger, however, of sugar being obliterated. Not all sugar land is suitable for raising pincapple.

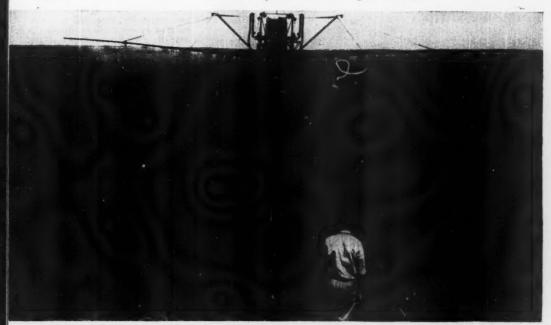
• Popular-The pincapple growers, unable to meet rising world demand, have seen Mexico, Cuba, and the Philippines grab an increasing share of the market. Hawaii now supplies about 68% of world demand; it used to be 90%

Kohala Sugar Co. is the first to try pineapple. Kohala lost \$260,935 in 1949 and \$130,797 in 1948. It might even have liquidated as other sugar

plantations have done, had it not been the sole support of an isolated com-munity of 6,000. This summer, Kohala -Hawaii's second biggest sugar plantation-allotted 250 of its 14,000 acres to pincapple.

It started flying in 4,375,000 pineapple tops for seed material. If the experiment works, more acres will be planted.

Kohala chose planes because they were cheaper and deliver the pineapple tops at just the pace they are needed for planting-and always in perfect



THE OLD OAKEN BUCKET, pineapple style. This formidable-looking gadget is the answer to a thirsty pineapple's prayer. Its two 50-ft. pooms can irrigate 12 acres a day. More efficient than ditches, it helps pineapple planters increase their acreage.

FRB Plans Loose Reins for Credit Buying

Board to impose mildly tighter terms for autos, appliances, and furniture around Oct. 1. Soft goods not affected.

In a couple of weeks, retailers will get their first taste of wartime controls. On or about Oct. 1, the Federal Reserve Board will reimpose a new version of Regulation W to put some clamps on consumer credit.

 The Program—At midweek, FRB was planning these not very severe controls:

• Credit terms on automobiles one-third down and 21 months to pay.

Appliance and furniture terms—
 15% down and 18 months to pay. No soft goods are included in the proposed regulation.

• Items costing under \$100 and single-payment loans—not affected.

• Charge accounts—not regulated.

These terms are a little milder than those first imposed by the board back in September, 1941; they are a little tougher than those in effect when Regulation W expired last year.

• Inflation—When Korea flared up, consumer credit stood at record highs. During July, consumer credit shot from

\$19.7-billion to \$20.3-billion. The previous high had been \$18-billion at the end of 1949. Only charge accounts failed to go up sharply.

failed to go up sharply.

One Angle—The chances are that the present Regulation W won't make much of a dent in this huge backlog of consumer debt. FRB says consumer credit controls are only one prong of an over-all attack on inflation.

• Lots of Cash—A quick look around the country shows why the present limited controls won't give more than a slight setback to the growth of credit. There's a lot of cash jingling in

There's a lot of eash jingling in people's pockets. After Korea, eash buying shot up just as fast as credit buying did. A Hartford appliance dealer summed it up: "Twe been paid in \$100 bills recently-something I hadn't seen since the war."

• Scrimping—Another thing, people may just change their buying habits scrimping a bit to dig up a bigger down payment. And this may do just what FRB doesn't want: shift demand at first from slower moving, less critical items into "hot" items like refrigerators, cars, and TV sets.

Retailers point out another factor. They think that a lot of people, who could afford to pay more down, take the present easy terms just for convenience. The new regulations won't blow them out of the market, though it may hit the lower-income buyer.

• How Tough?—Actually, the board's first terms aren't too much tougher than those already being offered by retailers—despite all that talk about no-down-payment and three-years-to-pay. In many other cases, the new Regulation W just means that stores will have to boost down payments about 50%, cut the time by a few months.

A number of retailers have voluntarily raised their terms since Korea. In Los Angeles, for example, a majority of dealers stiffened terms on July 27 at the request of conservative banks. Elsewhere, merchants became a little more "selective." Some have stopped granting credit to potential servicemen. Others upped terms on TV sets and other appliances to 20% down and 12 months to pay. One Chicago store, which tightened credit more than a month ago, found no perceptible drop in instalment buying.

FRB feels its regulations will affect four out of five auto-credit contracts, but only by shortening the payoff. In cars, the down payment isn't so important because of the many trade-ins.

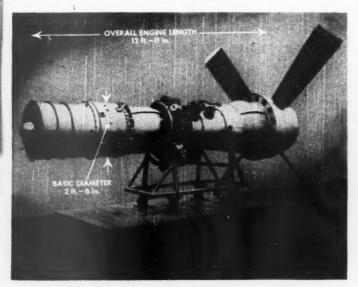
• Merchants Happy-Possibly the most significant thing about credit controls this time is that a lot of merchants frankly welcome them.

Back in 1941, merchants looked on the whole thing as government meddling leading toward socialism. Now, the National Dry Goods Assn. has endorsed credit controls since July.

Competition—One reason for the change: Retailers found the controls didn't really hurt. A more powerful one: today's competitive picture.

The retailer is sick of haggling over credit for fear of losing a customer to the man around the corner. One Cleveland department store man said: "Regulation W would at least make the cutrate stores and overnight neighborhood appliance stores compete with us on an equal credit footing."

• Another Spree—The big credit rush just after Korea has died down somewhat. But there will probably be another credit spree in the weeks between announcement of FRB regulations and the time they go into effect—especially since retailers think the board will tighten its terms soon.



Push-Pull Engine for Planes

Pratt & Whitney's new T-34 Turbo-Wasp engine delivers 90% of its more than 5,000 hp. to the prop, the rest to jet thrust. Fitted with a Hamilton-Standard four-bladed prop, it has flown a B-17 with the bomber's own four engines cut out. United Aircraft Corp.'s Pratt & Whitney Division took the wraps off the T-34 this week, after it had successfully completed 50 hours of test flight for the Navy Bureau of Aeronautics. The gas turbine weighs 2,550-lb., is operated by a single lever coordinating fuel with prop speed, flight speed, and altitude. It uses high-octane gas or jet fuels.



DEFENSE COORDINATORS: Seated, left to right, Navy's Matthews, Army's Pace, Air Force's Finletter, and (standing) Edward T. Dickinson. Result of their meetings:

Armed Services Work Together

Joint Secretaries, meeting twice a week, have brought harmony. But future budget stresses may strain their hard-won cooperation.

The bitter Army-Navy-Air Force infighting that rocked Defense Secretary Johnson's department for two years seems ended—for a while at least. A four-man team, sprung up since Korea, is responsible for this new peace in the Pentagon.

• Press Handout—Known as the "Joint Secretaries." its only charter is a Defense Department press handout, dated July 17. Secretary Johnson announced its creation "to aid their policyforming value." "They" are the Secretaries of Army, Navy, and Air Force, plus assistant E. T. Dickinson.

Already, the Joint Secretaries are responsible for a long string of accomplishments. Among them:

• Scrapping for good the onethird-to-each-service method of divvying up the defense budget.

• Working out the first \$10.5billion supplemental military spending figure.

 Deciding to give Navy's air arm a major role, such as it had in World War II.

 Setting the \$10- to \$15-billion more Truman is going to ask for defense this year.

 A plan for centralized control of the lagging guided missile program.

• Steps to put the brakes on rapidly rising prices on the stuff the military buys.

 Recommendations for improving the psychological warfare program. And–Johnson hopes–side-tracking squabbles between the services before they spread to Congress and the newspapers.

• The Future—The Joint Secretaries' role hasn't been easy, but it could have been a lot worse. Korea and mobilization had to be worked out in jig time, but there's been no limit on money, and there's been a sense of emergency to make people work together. There's still room for doubt whether the JS will be able to keep things running as smoothly in the future.

So far, the JS have had none of the headaches that go with having to tell the admirals that they can't have a supercarrier because the Air Force needs more B-36s. Real test of the JS probably won't come until after the initial buildup, when new defense budget ceilings are set.

• Jobs to Be Done—Meanwhile, JS has already got the Joint Chiefs of Staff thinking in terms of the job to be done, instead of in terms of budget ceilings. That means the Joint Chiefs are now sticking to the military business of deciding just how many planes, ships, guns it needs to do the job assigned to it. If the cost is too high, the Joint Secretaries can make the political decision on just what jobs the country can't afford.

Before Korea, the Joint Chiefs were trying to make both decisions. JS figures the responsibility of deciding

which jobs we can or cannot afford to prepare for belongs to civilians. It intends to see that it stays that way.

Here's the lineup of the Joint Sec-

Edward T. Dickinson—A copartner on the team of service secretaries, he was Johnson's personal choice. The 39-year-old Yale graduate prepares the IS agenda and does most of its developmental thinking. When he was with ECA, he helped launch the European Union idea that's now taking shape as a plan to integrate Europe's steel production. He was on the three-man committee that runs arms aid and came to the JS from ECA, where he had the job of divvying dollar aid. Before World War II, he was research assistant to the chairman of the board of

U.S. Steel Corp.
Frank Pace, Jr.—Brilliant, likable, not easily ruffled, he knows the inside ropes of government. A 38-year-old Arkansas lawyer, he's had about the fastest rise of any of the men who came in under Truman. He has been executive assistant to the Postmaster General. Deputy Budget Director, and was Budget Director when he was asked to take over as civilian head of the Army last April.

Thomas K. Finletter—Terse, efficient, quick-thinking, and blunt, Finletter brings to the team a good international background, along with a thorough knowledge of air. As chairman of Truman's Air Policy Committee, he fathered the 70-group Air !'orce idea. Chief of ECA's London mission for two years, he had returned to private law practice when he was asked to take over Air.

Francis P. Matthews—He's a soft-spoken, old-line politician and successful businessman; he keeps the quartet in touch with grass-roots politics. At the 1948 presidential convention, Matthews kept the Nebraska delegation in line behind Truman. He was appointed Navy Secretary from the job of president of the First Federal Savings and Loan Assn. of Omaha. Resented at first by the Navy, he's now spoken of "as the most underestimated man in Washington."

Matthews was slapped down hard by Truman for his speech urging "preventive war." But Matthews, who had no intention of embarrassing the President, had cleared his speech with Defense Dept. press. The trouble was that Defense Dept. press failed to show the speech to Steve Early—and no one sensed the clash with Truman's policies.

Think Twice—The Joint Secretaries already show signs of playing a big part in making major decisions on national policy. Johnson will think twice before overruling any recommendation that the team submits to him—even when he doesn't entirely go along with its de-

cisions; Pace, the JS chairman, is a

Truman favorite.

• Twice a Week-JS meets regularly, 4:30 to 6:30, each Tuesday and Thursday in Pace's office. It's at these informal, first-name, shirt-sleeve meetings that the team finds itself talking more and more about things not always of a strictly military nature. For instance, while one part of its agenda takes up psychological warfare, another part involves price and wage controls.

• Propaganda—Bigger and sharper teeth are one thing JS would like to see in

our propaganda machine.

This could be the deciding factor on whether Mao Tse-tung's forces enter

the Korean fighting.

The board wants to be ready to meet a Russian peace offensive with a countering worldwide offensive. Otherwise, JS fears, the pressure at home and abroad for an "easy" end to the Korean

war could be too great.

 Price Control—The JS team figures it's going to have to hit the line hard on rapidly rising prices. Since Korea, the costs of buying for the military have been increasing many times faster than civilian prices. There are two reasons for the rapid rise in prices of military goods:

• The services are bidding against

each other in many instances.

 Manufacturers, not wanting the business, are bidding each other up in hopes their competitors will get it.

First thing JS will do is put an end to competitive bidding between the services. That happens when, say, Navy and Air Force are both trying to negotiate contracts to buy radar from the same plant. One possible solution: activation of some M-Day production allocation plans, detailing where each of the services can—and can't—buy.

 Reluctant—But the biggest pressure for higher prices comes from industry, reluctant to cut back civilian production. JS thinks the answer hinges on whether you can control prices of military goods without regulating civilian goods—and wages—as well. Right now,

it thinks the answer is no.

• Would-Be Colonels—A lot of would-be colonels—big-name civilians looking for reserve commissions—are being told the need is for lieutenants and captains. That's the JS's doing, too. It got tired of seeing one service bid off against the other two by rank-happy civilians seeking soft billets. So it agreed to put an end to "trafficking in rank."

• Effect of Policy—Another job—less specific, but equally important: to advise Johnson on the probable effects—political and psychological—of major policy decisions both here and abroad. They also report reactions to such decisions and advise on possible courses of action. It's here that Dickinson

plays a big part.

\$5-Billion More Taxes

Congress has settled on higher rates for individuals and corporations, is still divided on plugging tax loopholes. No surplus-profits tax until next year.

The new tax bill is all packaged, ready for delivery to Truman, once a few loose ends are tidied up.

House and Senate tax conferces this week were putting on the finishing touches. Truman will sign it around Sept. 15—in time to start collecting higher rates from individuals on Oct. 1.

Corporations won't have to cough up more money right away; but they might as well begin building up their tax reserves faster. The new schedules, in effect; hike corporation taxes as of last July.

• \$50-Billion Take—The new law will yield about \$4.6-billion a year, upping the Treasury's total take to around \$42-billion a year. That is enough to pay for increased military expenditures until next July.

Early next year, another \$5-billion or so in new taxes—mostly from corporations—will be voted. That will just about match the peak revenue collected during World War II—nearly \$50-

billion.

• Rates—The Senate restores all the cuts in individual rates voted since the last war's end. However, the split-income provision and the \$600-perperson exemption—which amounted to postwar tax cuts—stay in effect. The ceiling on the amount the government can take from your income is raised from 77% to \$7%.

Net result: a 9% to 17% increase in

your tax bill.

Starting in the fourth quarter, the percentage of income withheld by employers rises from the present 15% to 18%.

All told, changes in personal taxes are going to cost individuals about \$2.5-

billion a year.

• Computation—Because the new rates go into effect in the fourth quarter, the Senate included two methods of figuring:

 Most people will apply a smaller increase to their whole income in 1950.

- If your taxable year begins after Oct. 1, you will apply the full increase.
 Sample—Take a man with a wife and two children, carning \$15,000, using the standard deduction and splitting his income. He now has to pay a tax of \$2,348. If his taxable year began Jan. 1, as most do, he will pay \$268 more this year—an increase of 11.4%. In a later tax year, the new bill would cost him \$354—or 15.1%.
- Corporations-New corporation rates will bring in an extra \$2-billion. The

old 38% ceiling goes. So does the extra-high "notch" rate on income between \$25-thousand and \$50-thousand

Under the new bill, corporations will pay a normal tax, plus a surtax. The normal rate will be 25% on all income. A surtax of 20% will apply to income above \$25-thousand.

These new rates apply to tax years beginning after last June 30. If a company's tax year began before June 30, it can use an alternative normal rate of 23% surtax of 19%.

The Mills plan, to make corporations pay taxes early in the year, will start gradually in 1951. That year, they will owe 60% of their tax in the first half;

in 1952, 70%; and so on.

 Quick Amortization—A solitary note of relief: Companies that expand or build plants for rearmament are going to be permitted to write off certified emergency facilities within a five-year period.

• Loopholes-The Senate and House don't see eye-to-eye on so-called loop-

holes in the tax law.

The bill the House passed before Korea would have raised \$433-million by plugging holes. But when the Senate raised taxes after Korea, it eased up on several points.

For example, the Senate:

 Made royalties from oil, gas, and mineral rights subject to the low capitalgains levy, not to income taxes.

 Granted a kind of split-income provision for family partnerships by recognizing as a partner anyone owning a capital interest even if that interest was an outright gift.

• Knocked out a House provision requiring corporations to withhold 10%

of dividends for taxes.

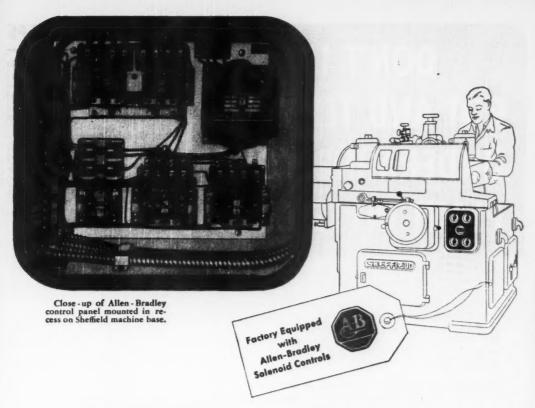
Right now, it's anybody's guess as to who will win out in conference.

The Senate did go along with the House in cracking down on "collapsible corporations," taxing business incomes of educational and charitable trusts, and on taxing investment income of insurance companies.

For days, the Senate flirted with an excess-profits tax designed to raise another \$4-billion a year. Truman wasn't enthusiastic, and the senators

voted it down.

Senators agreed to put an excessprofits tax into next year's tax legislation. And the levies will be retroactive at least to October, 1950—if not to July.



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BUSINESS BRIEFS

Inflation signs: Alpha Portland and Pennsylvania-Dixie have hiked cement prices 10¢ a bbl. in bulk and 12¢ in bags. Other northeastern mills should follow soon. Western mills boosted their prices Sept. 1. . . Price tags of six TV makers—Crosley, Hallicraters, Olympic, Zenith, Tele-Tone, Air-King—are up \$55. . . Domestic refiners have hiked platinum \$13 an oz. to \$90 in small quantities, \$87 bulk.

Rayon-wool carpets are covering more ground all the time (BW-Sep.2'50, p56). Mohawk Carpet Mills is now making its entire Woolripple line of a 50%-50% mixture.

Sears, Roebuck has followed Montgomery Ward with a string of price cuts in its midseason fall catalog (BW-Sep. 2'50,p28). The reason was the same, too—the book was made up five months ago.

Auto trade talk has it that Willys-Overland has finally picked the man who will become its president on a regular basis. Chairman Ward Canaday has been holding the job temporarily, but with the appointment of Raymond R. Rausch as his executive assistant, the word is that Rausch is being groomed for the job. He used to be with GE and Ford.

State censorship of TV films is illegal, a U.S. circuit court held. Pennsylvania's censorship board had ordered that TV stations submit films they planned to show. The TV stations maintained that regulation is in FCC's hands exclusively. The court agreed.

Synthetic rubber will soon be coming out of the government's 57-million plant at Louisville, closed since 1947. The plant will be opened and in full operation by Jan. 1. Kentucky Synthetic Rubber Co.—a combination of 10 synthetic-rubber makers—will run the plant.

Pennsylvania's Gov. Duff set up a new committee to serve as a State Economic Research Council. Its job will be to find ways of improving the usefulness and coverage of the state's statistical services.

Du Pont is set to begin building its fourth nylon yarn plant near Kingston, N. C. The plant will cover 635 acres and will employ 1,200. The company is also planning to boost neoprene output at its Louisville plant.



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DEFENSE

The Powers Truman Got

Defense Production Act gives him practically complete war powers—more than he had asked. What the law does on allocations, price and wage control, requisitioning, and defense expansion.

All business decisions now will be influenced—dominated sometimes—by Washington's ideas of how the economy should behave. Truman is winding up with full war power, under the Defense Production Act of 1950. He will use the power gradually at first, but later controls will spread out and engulf more and more of business.

Price- and wage-control powers under the act are scheduled to expire June 30 of next year. Other controls imposed before next June 30 can continue in effect until June 30, 1952. But whether the expiration dates are allowed to stand will depend on conditions. Here are the major powers:

I. Priorities and Allocations

Producers can be ordered to accept defense contracts. They can also be told to put these contracts ahead of all other business. In other words, Truman can force conversion to military production.

All materials can be controlled. Both defense and essential civilian needs can be given first claim on materials and facilities. The President not only can order cutbacks in nonmilitary production, but he can, if need be, force a shutdown of nonessential production.

Under allocations provisions, Truman can install consumer rationing.

Inventories can be limited. This power will be used to prevent hoarding or excessive stocking up.

II. Requisitioning

The President can requisition any material. He can also take parts and equipment needed for manufacturing, servicing, or operating defense needs. Truman, however, must first make a finding that the items to be requisitioned are necessary for defense, that the need for them is immediate, and that other means of obtaining them have been exhausted. Just compensation must be paid for requisitioned items.

III. Expanding Capacity & Supply

The government will guarantee bank loans to expand output. This will apply to facilities necessary to defense and to the development of new sources for essential minerals. The loans will be handled through the Federal Reserve System.

Long-term purchase contracts can be made for metals, minerals, liquid fuels, and other defense items. The chief purpose is to stimulate marginal production and development of new sources. The government may buy at above the market price—pay a subsidy, in other words.

The government can make direct federal loans to expand production. There is full power to set up a new agency to run the program, if Truman wishes.

Up to \$2-billion are authorized for the expansion program. The Treasury can be called on to make \$600-million available immediately. An additional \$1.4-billion are authorized to be appropriated by Congress later.

IV. Price-Wage Stabilization

Wage and price control can be attempted on a voluntary basis. The President has authority to seek industrylabor agreements to hold the line, so to speak, on prices and wages. And he can suspend the antitrust laws to make such agreements possible.

such agreements possible.

The President has authority to order price and wage ceilings. These ceilings can either be on a selective or blanket basis. To impose ceilings, Truman has only to find that voluntary stabilization wouldn't be adequate, and that prices have either risen or threaten to rise unreasonably above the level of May 24-June 24, 1950.

V. Limitations

Price ceilings and wage ceilings are tied together. If the President ordered a price ceiling on steel, then he would have to order a wage ceiling for steel workers. But there could be eases when the wage ceiling would be meaningless. If, for example, a price ceiling is put on a single item produced by the chemical industry, a wage ceiling would have to be placed on all chemical workers. However, if the President found that rising wages in the chemical industry

need more power?



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wouldn't push up the price of that single item, he could let the wages go on up.

Price and wage ceilings can't be set below the May 24-June 24 level—or a representative period nearest those dates in cases where the May 24-June 24 level was abnormal.

Farm price ceilings can't be set below the parity price—or below the highest price received by farmers in the base period.

Processors of farm commodities must be given a "profitable" ceiling. The ceiling price must be high enough to permit them to pay producers their guaranteed price, plus a generally fair and equitable margin of profit.

Ceilings can't be set on margin requirements on any commodity exchange. Neither can they be applied to rates or fees for professional services; prices or rentals of real property; rates charged by public utilities or common carriers; insurance rates; prices of newspapers, periodicals, books, motion pictures, and other communications.

Brand or trade names and grade labeling can't be eliminated or restricted. Standardization of any material is prohibited unless the President determines that such standardization is the only practical method for securing effective price controls.

No price control order may force a retailer to limit sale of his highest price

In establishing a ceiling price, the President must give consideration to sellers who have future-delivery contracts. This applies to materials processed from raw materials in which seasonal demands or normal business methods require contracts for future delivery.

The President can exempt any material from ceilings or lift ceilings. But he must find that such exemptions will stimulate production for the national defense, or that such ceilings aren't necessary to stabilize the economy.

VI. Settlement of Labor Disputes

The President has no power to order settlement of labor-management disputes. The legislation stipulates that disputes policy is to rely on voluntary action—negotiation and conciliation—to prevent strikes.

Nothing can be done that is contrary to either the Fair Labor Standards Act (minimum wages, maximum hours) or the Taft-Hartley act.

VII. Consumer, Housing Credit

The Federal Reserve Board has full power to regulate instalment credit. It will specify the size of down payments and the length of the instalment period for retail sales of such things as autos, home appliances, furniture, etc. This is the old "Regulation W" power.

The President can raise cash down

The President can raise cash down payments and shorten amortization periods on housing financed by government-insured mortgages.

VIII. General Provisions

Business advisory committees. They can be set up to consult with the government on any control program.

Small business. The legislation specifies that it is to be given favored treatment in all possible ways. But this is only a declaration of policy.

Antitrust laws. The government can grant exemptions where necessary.

Watchdog committee. A group of 10 members of the House and Senate banking committees (five from each) will ride herd on use of the powers.

Who Does What?

Three departments begin setting up agencies with which businessmen must deal under the new controls act.

Businessmen across the country this week are scribbling new names on their "whom to see in Washington" list.

With the passage of the Defense Production Act of 1950, the Departments of Interior, Agriculture, and Commerce are working out how to exercise their vast new powers (page 30) —and who's going to be in charge.

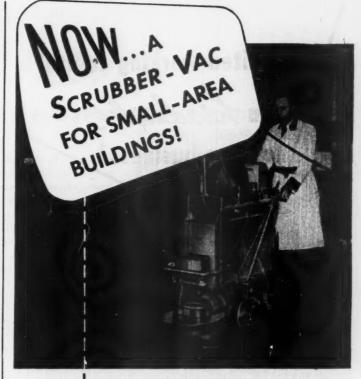
Just About All—These departments, between them, will exercise just about all the economic controls—with the exception of credit controls to be handled by the Federal Reserve Board. On paper, these departments would also have the authority on wage and price ceilings; but the tie-in of wages and prices written into the law makes it unlikely that ceilings will be fixed until Truman is ready to name another OPA.

Under Truman's executive order, Agriculture, Interior, and Commerce are claimant agencies serving as spokesmen for the needs of some industries. But each also becomes the allocation agency for certain commodities or services (BW-Aug.26'50,p19).

 Secretary Brannan is claimant for the farmers—and allocator of farm commodities, food, and fiber to all industry.

 Secretary Chapman is the claimant for the coal, petroleum, power, and minerals industries—and the allocator of coal, petroleum products, and power.

 Secretary Sawyer has about everything else. He's the claimant for the manufacturing industries, as well as the service, distribution, and transportation industries. And he's the allocator of



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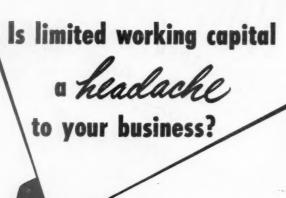
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everything not under Interior and Agriculture.

I. Commerce

Sawyer set about organizing his Defense Production Administration well before Congress approved the controls bill. He picked William Henry Harrison, president of International Telephone & Telegraph Co., as top man—Administrator of the Defense Production Authority. Harrison has three of his own men on the fifth floor of the Commerce Building. Already on the job are:

 Manly Fleischmann of Buffalo, the general counsel. He was with OPA and has been a consultant to Hoffman's

ECA.

Howard Chase, of General Foods, who is handling public relations.
 Coorne Wilde New England

 H. George Wilde, New England banker, the first Harrison assistant to arrive.

• Two Divisions—There will be two main divisions in Commerce:

The Office of Requirements will balance the demand for critical materials against supply, split up the available supply among different types of use.

The Office of Industry Operation will be the claimant for industries—and will

parcel out allocations.

There will be industry divisions for each critical material—steel, chemicals, nonferrous, rubber, lumber, leather, machinery, and the like. Industry advisory committees will be set up, where they don't already exist. Sawyer's Business Advisory Council—of which Harrison has been a member—will be a sounding board on over-all policy.

• The Staff—At the outset, it's expected that the agency—except at the top—will be staffed from Sawyer's Office of Industry and Commerce, under veteran Commerce official H. B. McCov. Thus Harrison will start with a skeleton staff of about 200. It will grow fast.

Industry men will be brought in, but there's little doubt that Commerce's own industry specialists will hold key

posts.

• Interagency—Sawyer would like to set up an interagency requirements committee with Harrison as chairman. This would bring together all the allocators from Interior, Commerce, and Agriculture to iron out difficulties. But up in this area, the organization charts aren't filled out.

II. Interior

Interior's control authority has stirred up more business opposition than Agriculture's or Commerce's. Reason: Interior's aggressive promotion of public power has generated a bitterend feud with the private power companies Private utility opposition was

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AT ANY SPEED
FROM TOP TO ZERO

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"Sacre Bleu", exclaimed LaSalle "Such progress Ive never seen"



To far-seeing business management it is apparent that the next half century will see the Southwest emerge as the greatest industrial area in the United States. Vast natural resources, assured low-cost power, temperate climate, and centrally located for low-cost distribution, this area offers management the geographical area ideal.

Brown & Root offers you experienced counsel, backed by more than thirty years of successful engineering and construction in the great Southwest.

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responsible for Chapman's decision to put an industry man in charge of Interior's new authority. Ralph K. Davies, president of the American Independent Oil Co. and wartime top man in Harold Ickes' Petroleum Administration for War, has been offered the job, according to the Washington grapevine.

 Council—An Electric Power Advisory Council will be organized, similar to committees already working in minerals and bituminous coal. This new council will consist of from 60 to 75 operating heads of utility companies and only two representatives of public power.

two representatives of public power. Interior's new agency will be staffed partly with industry people—but will draw heavily on existing bureaus.

• PAW Successor—The Oil and Gas Division, headed by Hugh A. Stewart, is a direct descendant of World War It's Petroleum Administration for War. Through its industry advisory committee—the National Petroleum Council— Interior and the oil industry have been working on shortages and military petroleum problems for several years.

Bureau of Mines, under Dr. James E. Boyd, is loaded with experts in mining, minerals, and coal-experts who have the confidence of their industry. Plans are afoot for using some of the new industry-expansion money to step up domestic supplies of copper, manganese, and other critical metals.

III. Agriculture

Agriculture will have an easier time than Interior or Commerce.

For one thing, it will have less to do. For another, Agriculture's peacetime "action programs"—price support, conservation, etc.—have set up a staff big and experienced enough for any task.

Of course, if rationing and price control come along, a new agency will be created. But that seems a long way off.

Big Agency—Brannan has turned controls over to his Production & Marketing Administration, which is the agency that reaches into every farm county and buys all surplus farm commodities under the price support law. PMA has 2.000 full-time employees.

Actually, PMA is the direct descendant of World War II's War Food Administration. But now, Ralph Trigg, PMA Administrator, is mainly keeping tabs on supply vs. war requirements just to see what the pinches might be. So far-except for wool-there's none.

 Claimant-Trigg has handed controls over to his Price Support and Foreign Supply Branch, headed by L. B. Taylor. Taylor will handle farmers' needs for machinery, fertilizer, and other requirements-the "claimant" side of the operation.

Taylor's assistant, F. Marion Rhodes, will head up the food supply and allocation part of the job.





AMERICA'S BUYING GUIDE FOR OVER 60 YEARS When shoppers are ready to buy, 9 out of 10 go direct to the 'yellow pages' of the telephone directory for whereto-buy-it information.

That's why it's sound strategy to support the sale of your products with Trade Mark Service... at the community level. Your trade-mark or brand name can be displayed over a list of your dealers in the 'yellow pages' in 32,000,000 directories all over the country... or in those covering specific local markets.

Trade Mark Service will help your dealers chalk up more sales...cut down on substitution. Use it to localize your national advertising.

For further information, call your local telephone business office or see the latest issue of Standard Rate and Data





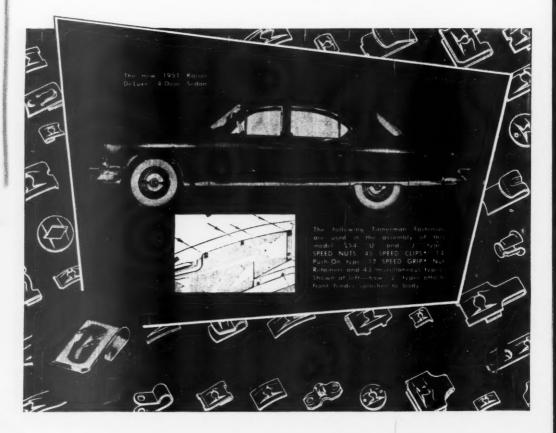
SPEED NUT Route To better assembly

When the sleek, new Kaiser for 1951 was taking shape on designers' drawing boards, an important economy and performance decision was made. On the basis of previous experience, it was agreed that maximum use should be made of SPEED NUTS for vital fastening functions.

From bumper to bumper of the new car, K-F engineers made the most of the cost-saving, product-improving assembly advantages of SPEED NUTS. Result... there are 269 of these lightning-fast, self-locking fasteners used for various attachments on all Kaiser models.

Kaiser-Frazer's reasons for specifying SPEED NUT brand fasteners can be yours: they're the most economical and effective fasteners ever developed. Let us prove it with a comprehensive fastening Analysis of your product. Meanwhile—get your copy of "Savings Stories", a book-full of cost-saving fastening ideas.

Ask your Tinnerman representative for a copy, or write: TINNERMAN PRODUCTS, INC., Cleveland, Ohio. In Canada: Dominion Fasteners Ltd., Hamilton. In England: Simmons Aerocessories, Ltd., Treforest, Wales.



PRODUCTION

Liquid Metals: How much can we make?

Metal	1948 Output	Potential Output	1948 Price
Aluminum	623,456 tons	450,000 tons	17¢ o lb
Antimony	5,970 tens	9,000 tens	38 1/2 ¢ a 16
Bismuth	Not available	1,000 tens	\$2 a lb
Codmium	3,888 tons	4,390 tens	\$2 a lb
Cesium	1 lb. (est.)	1 ton	\$4 a gram
Gallium	200 fb.	20 tens	\$2.50 a gram
Germanium	'200 lb. (est.)	Not available	\$180 a lb.
Indium	0.5 fb.	6.25 tons	\$27 a lb.
Load	406,684 tons	450,000 tons	12¢ a lb.
Lithium	Not available	100 tons	\$15 a lb.
Magnesium	10,003 tens	123,000 tons	20 % ¢ a lb.
Mercury	547 tons	1,140 tons	\$1.18 a lb.
Potassium	25 tons	2,000-4,000 tens	\$2.50 e lb.
Rubidium	100 grams (est.)	1 ton	\$4.50 a gram
Sodium	20,000 tons (est.)	Not available	16¢ a lb.
Sodium-Potassium Alloy	50 tens	2,000-4,000 tens	\$2 a lb.
Thallium	7.5 tons	15 tons (est.)	\$15 a lb.
Tin	6 tons	Negligible	99% calb.
Zinc	787,764 tons	850,000 tens	99¢ a lb.

O BUSINESS WEEK

Source: Liquid-Metals Handbook

Money in Metals That Flow

New AEC-Navy report outlines uses and properties of fluid metals. Once special equipment for handling them is developed, they could become cost cutters and production boosters.

This week, industry was handed the results of the most extensive research ever done in the field of liquid and vaporized metals. Atomic Energy Commission and the Navy came out with a report that may show the way for a whole range of new uses for these materials. The report is titled Liquid-Metals Handbook. It's available for \$1.25 from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Mercury in vapor form has been used for years in mercury boilers because it is an efficient heat-transfer agent. But mercury isn't the only metal that can be used for heat transfer. Aluminum, antimony, bismuth, cadmium, lithium, magnesium, and sodium are some of the others that AEC has been working with.

Properties—These metals have relatively low melting points (from room temperature to a few hundred degrees),

but except for mercury, they all have very high boiling points. AEC has been using them in some of its new reactors. These reactors are operated at very high temperatures, and liquid metals are used to carry off the heat and use it elsewhere as a power source.

Right now, most heat-transfer operations use steam. But where you are working with high temperatures, steam gets to be complicated and dangerous. That's because in order to get it hotter, you have to boost the pressure. Highpressure steam requires high-pressure equipment which is expensive. And when you're using very high pressures, every valve and joint becomes a potential bomb.

• Low Pressure—That's why you sometimes might be better off with liquid metal. You can raise the temperature of the heat-transfer agent without having to use high pressures. And even if you use temperatures above the boiling

\$25,000 Saved in 24 months

This Sheffield machine gages and segregates refrigerator valve plates into 28 classifications—2,000 parts an hour. It has already paid for itself and is now saving a little more than \$1,000 a month ever the previous hand gaging method.

31,000 a month ever the previous hand gaging method.

The job is exacting because these valve plates have a highly lapped finish.

They can be completely ruined by even the slightest scratch, and that happened frequently when they were gaged by hand.

The parts are loaded into the machine and a button pressed. The machine sorts and stacks them in individual chutes according to size, without marring their flaich.

sorts and stacks them in individual chutes according to size, without marring their finish.

If you inspect mass-produced parts, why not look into the possibilities of Shoffield gaging and segregating machines. You will gain the benefit of Shoffield's many years of experience in this field. Write for engineering data.

548







point of the metal, the vapor pressure you have to maintain is far lower than it would be with steam.

Up to now, mercury boilers, sodiumcooled engine valves, and molten metal baths for heat-treating have been the main applications of fluid metals. But with data from the AEC-Navy study, industry may do a lot with them.

Here are just a few of the developments you can expect to see once equipment and materials supply problems are solved:

 Recovery of metals. Some metal recovery processes now in use vaporize the metal under low pressure, then condense it. What it amounts to is a distillation process. The condenser is cooled by water or air, and the result is metal that's fairly pure.

But it generally isn't as pure as it could be because it's almost impossible to get complete control of the temperature of the cooling agent. Since it is a distillation process, the best way to get the purest possible metal is to cool the vapor at precisely the right time and temperature.

If a liquid metal cooling agent were used, increased control of cooling temperatures would result in much purer metal. A series of condensing steps could be used, with carefully controlled cooling temperatures at each stage.

• Control of mold and die temperatures. Liquid metals could be circulated through molds to maintain them at proper temperatures. In certain molding operations where a series of temperature changes is required—such as glass-container making—liquid metal would cut waste, permit the use of thinner mold sections, and simplify control.

Die-casting machines operate at different temperatures for different metals. Temperatures are controlled by multiple streams of water and variation of operating speeds of the machine. During shutdown periods, temperature is maintained with gas.

These present methods give very little accurate control over temperature, but if liquid metal were circulated through the dies, experts figure the control it would give would result in uniform and accurate castings and longer die life.

• Reheating steam. Superheated steam which has been put through a high-pressure turbine is usually reheated, then sent through a low pressure turbine. This is done by carrying the steam—at pressures from 500 psi. to 500 psi.—back from the turbine room to the boiler, through reheat coils, and then back to the low-pressure turbine.

A more efficient way to do the job might be with liquid metal. The steam could be reheated in a heat exchanger placed between the two turbines. Heat would be carried from the boiler by liquid metal. By cutting down the distance the steam would have to travel,

*** TOO PRECIOUS TO WASTE! ***



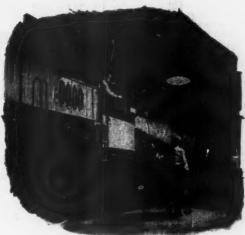
The needs of national defense, coming at a time of peak industrial production, have made freight car space a precious commodity...too precious to waste!

Freight cars are in the hands of shippers and receivers of freight about half the time — in the hands of the railroads the other half. Anything that either shippers or the railroads can do to speed up the movement of freight cars and reduce the time they are not in use will make more cars available for the movement of the nation's traffic.

HERE'S WHAT THE RAILROADS ARE DOING!

The railroads have moved rapidly to provide the nation with the transportation it needs. They are ordering tens of thousands of new freight cars for early delivery and will continue to acquire cars to bring ownership up to 1,850,000. They are stepping up their car repair and rebuilding program to put additional thousands of cars at your service. In addition, the railroads have pledged themselves to secure the utmost efficiency in the use of cars. This is being achieved by—

- speeding up road haul and terminal movements
- heavier and faster loading and unloading of company material
- · better handling of cars
- prompt embargoes to avoid congestion



HERE'S WHAT

Shippers can help immeasurably by-

- loading and unloading cars quickly
- furnishing billing promptly
- loading cars as heavily as commercial requirements permit
- unloading cars completely, including bracing and blocking

Shippers and railroads working together have licked big jobs before—and, with the same sort of teamwork, they will do it again.



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you would also cut down the pressure loss, so power output would be greater. Smaller pipes could be used, and heat transfer would be more efficient, too.

• Equipment Problems—There's a big catch, of course: This kind of setup would require a lot of special equipment. You would have to have a secondary liquid-metal circulation system, and that would mean plenty of special pumps and valves. That's a typical equipment problem that would have to be solved before liquid metal could be widely used as a heat-transfer agent.

There are plenty of other possible uses for liquid metal. They include preheating blast-furnace air, cooling rotating equipment, cooling jet-turbine blades by sealing liquid metal into them, distilling tars, and high-boiling aromatics, and plenty of others.

• First Trials-Sun Oil Co. began using mercury vapors for distillation of crude

oil. Sun now has six of these plants.

Liquid sodium has been used to cool engine valves since 1932. A bit of sodium is sealed into the valve stem, and as it splashes around, it carries the heat away from the valve head, down the stem, and out through the valve guides.

During the war, Doehler-Jarvis Corp. used cores into which sodium had been scaled for magnesium casting. This is said to have boosted the life of the cores and increased the operating speed of the casting machine.

• Experimental—But except for these few applications—and they are largely experimental—no large-scale use of liquid metal has been attempted. That's partly because not too much was known until now about the properties of these metals and party because little equipment for handling them has been developed so far.

Liquid Metals: The Principal Suppliers

According to the Liquid-Metals Handbook, 33 companies in this country produce the 19 metals suitable for liquefied use.

ALUMINUM

Aluminum Co. of America Reynolds Metals Co. Permanente Metals Co.

ANTIMONY

Texas Mining & Smelting Div. (National Lead Co.) Harshaw Chemical Co.

BISMUTH

American Smelting & Refining Co. Anaconda Copper Mining Co. U. S. Smelting, Refining & Mining Co. Cerro de Pasco Copper Corp.

CADMIUM

American Smelting & Refining Co. Bunker Hill & Sullivan Mining & Concentrating Co. Sullivan Mining Co. St. Joseph Lead Co. Anaconda Copper Mining Co. National Zinc Co., Inc. Eagle-Picher Mining & Smelting Co.

CESIUM

Maywood Chemical Works Fairmount Chemical Co. De Rewal International Rare Metals Co.

GALLIUM

Eagle-Picher Lead Co. Aluminum Co. of America

GERMANIUM

Eagle-Picher Lead Co.

INDIUM

Anaconda Copper Mining Co. American Smelting & Refining Co. National Zinc Co., Inc. American Steel & Wire Co.

LEAD

American Smelting & Refining Co. Bunker Hill Smelter, Bunker Hill & Sullivan Mining & Concentrating Co. Eagle-Picher Lead Co. National Lead Co. St. Joseph Lead Co. U. S. Smelting, Refining & Mining Co.

LITHIUM

Maywood Chemical Works Metallov Corp.

MAGNESIUM

Dow Chemical Co.

MERCURY

Sonoma Quicksilver Mines, Inc. Cordero Mining Co. Bonanza Mines, Inc.

POTASSIUM

Mine Safety Appliances Co.

RUBIDIUN

Fairmount Chemical Co. De Rewal International Rare Metals Co.

SODIUM

Ethyl Corp.
E. İ. du Pont de Nemours & Co.
National Distillers Products Corp.

SODIUM-POTASSIUM ALLOY

Mine Safety Appliances Co.

THALLIUM

American Smelting & Refining Co.

TIN

Vulcan Detinning Co. Metal & Thermit Corp.

ZINC

St. Joseph Lead Co.
American Zinc Co.
National Zinc Co. Inc.
Eagle-Picher Mining & Smelting Co.
New Jersey Zinc Co.
American Smelting & Refining Co.
Anaconda Copper Mining Co.

WHAT'S DOING IN DALLAS



THINK OF DALLAS

... and you think of beautiful girls. Looking at you is dark-eyed, winsome, 18-year-old Capt. Judy Basden of Dallas. Her title is that of the leader of the Rangerettes of Kilgore (Texas) Junior College, a spectacular all-girl drill team reminiscent of Redio City's Rockettes. Judy led the Rangerettes last month at the All-Star football game in Chicago. The Rangerettes will perforp next New Year's Day in Dallas' Cotton Bowl (see below).

COTTON BOWL

(Thumbnail sketch of a Dallas institution)

Bu Iulian Stag

"Nothing in Dallas," said the late G. B. Dealey, "was ever built big enough."

The Cotton Bowl is a case in point. When it was built in 1930, with about 45,000 seats, skeptics said it'd never be filled

This year, a New Year's Day crowd of 75,349 spectators paid a gate of \$359,000 to watch the Cotton Bowl football classic. That was more than it cost to build the original stadium.

The present structure (the name indicates that Dallas is a world cotton market) has more seats than Yankee Stadium, twas enlarged in 1948, and again last year.

The Bowl is in Fair Park, 10 minutes from downtown Dallas. The State Fair of Texas operates it, and Southwest Conference universities rent it for their games. S.M.U. plays Georgia Tech in the Bowl Sept. 23. An all-time attendance record for a football stadium on one day will likely be set Oct. 14. when two major games will be played in the Cotton Bowl (Texas U.-Okla. U., 2 p.m., S. M. U. - Okla. A. & M., 8 p.m.), with between 125,000 and 150,000 total expected.

Last April, a crowd of 54,000 saw the Dallas team of the Texas League open the local baseball season, the second-largest audience ever at a minor league game.

Next month (Oct. 17), during the State Fair in Dallas (biggest of all state fairs), Frank Sinatra will croon under the moon in the Cotton Bowl as an extra attraction.

Dallas Has What Industry Seeks

Business heads, management men find that Dallas occupies an important, strategic place in the nation's present-day economic pattern. Biggest opportunities lie just ahead.

We are now proceeding with plans for installing a plant in the Southwest in order that we may properly serve our trade in that territory. The demands for service and the increasing costs of transportation are such that we, operating on a national basis, must place ourselves in a position to adequately serve all territories.— E. V. Johnson, president, United States Envelope Co.. Springfield, Mass., in his last annual report. Plant is now under construction in Dallas.

This is the boomingest of all the regions over the past decade—BUSINESS WEEK, Nov. 26, 1949, describing the "Dallas Region" (Eleventh Federal Reserve District) on resumption of the famed BUSI-NESS WEEK Regional Income Indexes.

■ September days are becoming crisp, and business-building decisions for '50-'51 are in the making. The times call for plans and action.

One city is receiving more than usual attention from management men and business leaders who think in terms of national scope. This city is Dallas.

These are the keystone factors:

- The Dallas Southwest is the rich, populous, coming region, the big, beckoning market.
- Decentralization, or dispersion, points to Dallas as the strategic choice for industry.
- Today more than ever before Dallas is a focal-type of city in 1950 U. S.

For example: Dresser Industries, Inc., is roughly a \$38,000,000 group with more than \$80,000,000 sales, its plants scattered through New York, Pennsylvania, Ohio, Indiana, Arkansas, Texas, and California. It serves the booming oil and gas industry with equipment.

H. N. Mallon, president of Dresser, addressed the Dallas Advertising League Aug. 4, on "Why We Chose Dallas."

Among many other desirable aspects of Dallas, Mr. Mallon pointed up this significant one: "We found that Dallas is located at the crossroads."

Dresser, formerly in Cleveland, moved into its new headquarters in Dallas in June.

Because Dallas commands the Southwest as a hill commands a city, the best way to describe this vast, sunny regional market is as the Dallas Southwest. That is how the nationally operating companies flocking into Dallas in the postwar parade regard it.

In BUSINESS WEEK'S accepted Regional Income Indexes, the Dallas Region has been one of the leading regions month after month in income percentage growth.

On July 29, BW reported for the Dallas Region (303.2 per cent over 1941): "In-

come continued its steady advance in June; the level is now triple 1941's. Industrial growth is still the dominant factor . . ."

• Growth is indeed the word in this optimistic Texas of big money, big ideas, and, of course, big hats!

New preliminary census figures suggest what's doing: Metropolitan Dallas now has 612,318 population, up 53.6 per cent; the Dallas-Fort Worth area, virtually one metropolitan area, now has nearly 1,000,000 people; within 100 mi. radius of Dallas, 2,058,394 population; within 300 mi., 10,283,036.

The Dallas Southwest, a 7-state integrated market, represents 18,346,516 customers with \$18,331,377,000 in buying power (Sales Management estimate).

Here's a salient statistic: Wholesale dollar volume makes Dallas the No. 1 city in the South as a wholesale center, with more than \$2 billions in sales in 1948. This is a 358 per cent gain over 1939 (Census of Business, U. S. Dept. of Commerce).

More and more business organizations are realizing the necessity of serving the Dallas Southwest market from within – for competitive advantage, speed, service needs, and cost-saving.

Recently, the Mid-Continent Industrial Council issued a brochure, "America's Arsenal Belongs Inland . . ." The Korean war has given new, serious meaning to the argument for dispersion of industry. The postwar migration of Chance Vought Atr-craft to Dallas is instructive in this regard.

■ Cities, like people, have personalities. Dallas has a business personality. Consider the newspapers: Both the Dallas Morning News and the Dallas Times Herald maintain business editors and staffs, giving outstanding coverage to news of business.

In Dallas, in a wide-awake atmosphere of cosmopolitanism and snap, the East meets the West, and North and South merge.

DALLAS BRIEF

Texas Bank & Trust Company of Dallas is now the largest state-chartered bank in Texas (total resources June 30, \$34,003,829).

Industrial Properties Corp.

paid for this advertisement for the Dallas Charaber of Commerce in the interest of Dallas development. It is the inith of a monthly series to keep you posted on Dallas, the city of opportunity in the Southwest. Would you like copies of this advertisement, others in the series, or other information? Address:

Dallas Chamber of Commerce Dept. B — Dallas 2, Texas For an air conditioning system thats...

"ELECTRICALLY RIGHT"



MOTORS ANA CONTROL

We did—for the new system on our main floor. Been running perfectly since the day it started —and not a single penny for repairs!

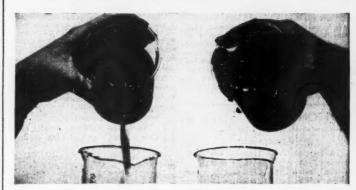


Make a NSU Today to mention G-E motors and control to your airconditioning contractor, architect, orconsulting engineer. Apparatus Dept., General Electric Co., Schenectady 5, N. Y.





MUD AND MORE MUD: To oil-well drillers, it's a vital commodity. Mud lubricates drill bits, cleans and seals the well hole. Generally, supplies come from the well shaft.



USEFUL STUFF when it's right, the mud can't be too thick or too thin. Variations from the proper mixture could halt drilling or even result in wrecked equipment.

\$10-Million a Year for Mud

Mud is a \$10-million-a-year business in the petroleum industry. On almost every new hole they sink, drillers pump mud into the casing.

For the petroleum engineer, mud does many things. It cools and lubricates the drilling bit; it flushes rock cuttings from the bottom and carries them to the surface; it plasters the sides of a hole; and it withstands gas pressures that could wreck the rig.

To do all this, a mud mix has to be pretty versatile. It must gel enough to hold cuttings in suspension when drilling stops. But it must become fluid again when drilling resumes. It must have body to resist pressure, but be light enough to pump readily. It must form a plaster-like coating on the hole's walls, but only a thin coating. Too

thick a layer could cause the drill to stick.

Drillers get these qualities by throwing almost everything but the kitchen sink into the mix. For instance cotton-seed hulls, fish scales, or beet pulp are mixed with mud to help seal porous rock formations. That helps prevent excessive mud loss, which can be costly (last year's bill for mud materials was about 25¢ a drilled foot).

Ordinarily, drillers when they sink a well strike enough shales and clay to provide their own mud supply. Where natural muds aren't to be had, though, they have to buy a packaged product in powdered form. They add water (or sometimes oil), certain chemicals, and whatever binder is required. All this averages about 3% of the well's cost.



MIXING THE MIX is a precision job. With a mobile lab, an engineer keeps close check to be sure the mud formula is O.K. Samples identify formations at various depths.



CHEMICALS HELP make the mix. As drilling conditions vary with drilling levels, formulas are changed to accommodate them. But the same mud's used over and over again.



Sevel-Depth Shoe \$7.50

Cuts Everything from Wood to Steel

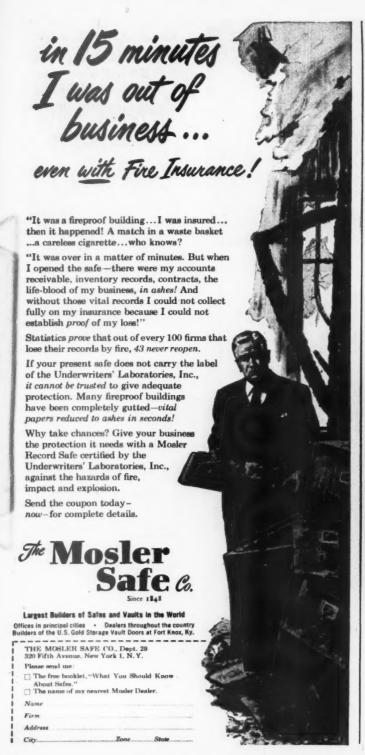
A standout for price, power, performance, quality and easy handling, this new, light-weight 8-1/2" MallSaw has a capacity of 3 on straight cuts. With Bevel-Depth Shoe attached it will make straight cuts from 11/16" to 3", and 45-degree bevel cuts 5/16" to 1-7/8".

Choice of right or left combination blade, 115V or 220V AC-DC motor. Blades are available for dadoing; grooving tile, transite, concrete and cutting light gauge metals. Other models with 2" to 4-1/2" capacity.

32 Factory-Owned Service Stations from Coast to Coast provide quick, dependable repair service. Over 1000 Mall Tools for a million jobs. A Dealer in any town can supply you. 30 years experience manufacturing portable power tools.

See your Mail Dealer today and write for FREE 52-page booklet "Mail Partable Power Tools".

MALL TOOL COMPANY



PRODUCTION BRIEFS

Sulphuric acid is made by a new process of American Cyanamid's Chemical Construction Corp. It eliminates seven conventional processing steps at a saving of up to 25% in equipment.

A license for rainmakers may be a must in the future, according to Dr. Bernard Vonnegut, a General Electric weather scientist. Amateur cloud seeders are apt to upset qualified rainmaking operations. So state or governmental control may be in the offing.

Eaton Mfg. Co., Cleveland, has a patented development that uses a mixture of dry lubricant and powdered iron for magnetic clutches (BW-June3'50, p44). A dry mixture simplifies the sealing of a clutch against leakage.

100-million frames per sec. is the speed of a camera developed by Army's Ordnance Dept. at Aberdeen Proving Ground, Md. It's used to record shock and detonation waves in the study of explosives.



Squeezes Out Steel

Designed specifically for the cold extrusion of steel (BW-Apr.1'50,p64), this newest Lake Erie Engineering Corp. press provides pressures as high as 100 tons psi. The press has just been installed at the plant of Multins Mfg. Co., Warren, Ohio. It will be used to produce a pilot bot of projectiles for 105-mm. howitzer, and antiaircraft projectiles for the Navy.

Press advantages: large daylight opening (for easy loading); high tonnage and thus high pressures; fast operating speed.



It's a Short Story...

Whether you are designer, maker, seller, or user of washing machines, home freezers, radios, TV cabinets, lighting fixtures or the like, you are interested in a fine finish for the article. And you might hear someone speaking of the wonders of CTA.

"What do you mean, CTA?" is the natural question. The answer: "Controlled Temperature Application."

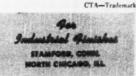
CTA is a ZAPON trademark for the modern method of applying finish that saves substantially on time, labor, and material. In CTA, heat takes the place of a thinner in reducing finish to sprayable consistency. This hot finish flows easier, gives proper thickness with fewer "passes" of the spray gun... makes a durable finish of higher gloss. So there you have it—CTA means better quality at lower cost.

ZAPON has developed a complete line of finishes—pigmented or clear lacquers and enamels—to take full advantage of CTA. And ZAPON Service from Every Angle offers just the right help on finishing—from initial planning on through surface preparation, application, baking or drying.

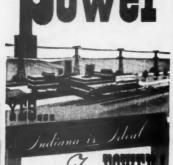
A letter, wire, or phone call will bring a ZAPON Customer Service representative to help right on your own production line.



ATLAS
POWDER COMPANY
WILMINGTON 99, BELAWARE







■ With plenty of low cost Indiana coal, and an adequate water supply, electric generating stations now produce nearly 2,000,000 H.P. for industry, commerce and agriculture. Firm power for Indiana's multi-fold activities.

Within another 18 months an additional 300,000 H.P. will be available for use. And, the thousands of miles of transmission lines now delivering power in Indiana are interconnected with systems in surrounding areas for mutual strengthening of supply. Indiana offers you adequate firm power.

AND WHAT ABOUT RATES?

Under fair, constructive State legislation, Indiana manufacturers find their electric power costs as low as ½ of 1% of their total production expense. Yes, indigna offers firm power, aulequote, cheap, to industry, commerce and agriculture in all parts of the state.

In addition, Indiana also offers you an equitable tax structure, fine labor, excellent transportation facilities, raw materiols, a good educational system and wonderful recreation areas. If you are looking for a location for your business, investigate the many locations in Ideal Indiana.

Write for our booklet,
"Industrial Facts about Indiana"
now. Please give your title and
company name when writing.

Indiana

DEPARTMENT of COMMERCE and PUBLIC RELATIONS Dept 1811 - State Koose - Indianapoles, Ind

NEW PRODUCTS



Hand Chain Hoist Is Light but Hefty

Yale & Towne Mfg. Co. says its hand-operated chain hoist weighs less than conventional hoists of the same capacity, reduces strain on overhead structures, is easy to carry.

The hoist's Synchromatic brake is a pawl and ratchet device for split-second automatic braking. According to Y&T, you can lower a load to the floor inch-by-inch with no trouble.

The hoist is made of aluminum castings and alloy steel to reduce weight without losing strength. Parts inside the hoist frame were kept to a minimum.

Y&T says a man can lift 1,000 lb. with less work than it takes to climb an average flight of stairs. The four models, with ½-ton, 1-ton, 1½-ton, and 2-ton capacities, will raise a full load three feet in 20 seconds. Chains for the hoists provide for a standard lift of eight feet. Other lifts and chain lengths are available.

• Source: Yale & Towne Mfg. Co., 11,000 Roosevelt Blvd., Philadelphia 15.

Radioactivity Cleaner

You can't stop an A-bomb. But you can reduce its radioactive effects. Atomlab Co. says its chemical solution, called Radiacwash, cuts down contamination before it can penetrate the skin. It reportedly works faster and more effectively than the strong soap and detergent methods recommended in the government's book, The Effects of Atomic Weapons.

The liquid should be applied as

soon as possible after contamination.

Radiacwash has a pH (acid-alkaline content) of six or less. Atomlab says this means that, while decontaminating, it won't hurt you. The company claims that the liquid acts as a detergent, emulsifier, solvent, ion-extractor, and surface wetter and carrier.

Atomlab's problem was to find a single decontaminating agent for over 200 radioactive isotopes. After a year of research, Atomlab scientists think they have found the answer.

No decontaminating agent is 100% effective. The aim is to reduce radioactive contamination to a safe biological level. Atomlab says Radiacwash works faster, reduces contamination to a level two to 30 times lower than oldstyle decontaminating agents.

A highly concentrated solution, Radiacwash can be diluted for specific purposes, such as decontaminating cloth, glass, and metal. A mixture of five parts water to one part Radiacwash is effective and safe for skin application.

Source: Atomlab Co., 489 Fifth Ave., New York 17. Cost: \$4.98 per gal.

Fast-Feed Welder

A welding unit developed by Lincoln Electric Co. continuously feeds 5/64-in. electrode wires. The unit carries 600 amp. and needs the automatic feed to keep the wire coming fast enough.

The wire-feeding device is in the control case. It consists of a variable speed motor, plus a control rheostat and current relay. The electrode wire from the reel goes through the conductor cable to the welding gun. The gun deposits granular flux around the arc.

Lincoln says the wire's high current densities make a penetrating are which, in turn, permits high welding speeds.

Source: Lincoln Electric Co., Cleveland 1. Ohio.

Dust Stays Inside

Cleaning a motor generator with a power blower dirties the machine room. Lehara Sales Corp.'s Blo-Vac cover keeps the room clean by confining carbon and copper dust. When a power blower raises dust, the "tent" holds the dust until it is sucked off by a vacuum unit.

The cover is made of heavy cotton drill, coated inside and out with oil-resistant Neoprene. It has 15 zippers for the cleaning equipment.

Lehara says the cover fits any motor generator in an elevator plant or generators of equivalent size. The cover retails for \$48,50.

 Source: Lehara Sales Corp., 485 Fifth Ave., New York, 17.



NEW STANDARDS SAN BROW OUT OF ARMA'S "BRAIN BLOCKS"

On June 29, 1950, Arma Corporation made the first public showing of an ARMAMATIC precision control equipped machine tool actuated by an electronic brain—the ARMATROL precision transmission.



This development is of tremendous defense production importance due to . . . minimum training requirements of unskilled operators (a typical housewife, with no previous factory experience, will take five minutes of training to begin operation of 1 to 4 machines each turning

out up to 7 times as many parts as a skilled mechanic could finish manually)... economy impossible with manual operation... repetitive possibilities not usually built into non-automatic general purpose tools... standby availability over a long period of time for the automatic reproduction of parts once manufactured by this technique.

At the moment there is not any specific literature or printed data on this equipment. It may be some time before any will be available. Meanwhile the technical press, sparked by the first comprehensive reporting of this development in THE NEW YORK TIMES of June 30th in a signed article by Hartley W. Barclay, is giving many of the details potential users will wish to have.

Arma "Brein Blocks" make such a system possible not only for lathes but also for many other machine tools. "Brain Blocks" are the unique post-war electrical components developed by Arma for the U. S. defense establishments.

To interested machine tool manufacturers and potential users we stand ready to demonstrate and negotiate.

The "Brain Block" technique of instrumentation was created by the people of Arma Corporation as part of their basic work for the U. S. defense establishments. Now in their 32nd year of developing and manufac-

turing such uncommon things as electrical analogue computers, complicated gun directors, gyro compasses, and complex remote control systems, they are only beginning to turn a part of their energies toward instrumentation for industry.

Basic information on Arma products released from security restrictions is being put before your designers through Electronics, Design News, Machine Design, Product Design & Development, and Product Engineering. Why not have your designers explore with us the new instrumentation possibilities this may open to your organization.

ARMA CORPORATION

254 36th STREET, BROOKLYN 19, N. Y.

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"Love that Speed-File"...



and every other gal will, too!

It's a file to make any girl smile and point with pride...the great new Art Metal Speed-File. With truly automatic expansion at back of each drawer (contents slope back a full 3½ inches when drawers are opened) you gain more filing space...speed and convenience in filing...use less effort and time in finding.

Speed-File drawers are made with a rigid front for greater strength and durability. Their construction makes operation completely safe and easy. All five drawers are standard fullheight and use standard size vertical file guides – eliminating need of special size guides. And, to make filing even easier and finding faster—there's the Art Metal ball bearing roller side drawer suspension—so easy rolling, smooth, quiet and clean. For space saving, time saving, effort saving filing...the Art Metal Speed-File is first and finest.

Judge your own files! — Write Art Metal for full information on the Speed-File and other units in Art Metal's complete line of modern files. Ask for your free copy of Art Metal's "Simplified File Analysis". It will thow you how to analyze and improve your files—and it's quick and easy.

ART METAL CONSTRUCTION CO.

Art Metal



For the finest in business equipment... look to Art Metal !

NEW PRODUCTS BRIEFS

A self-locking fastening pin slotted along its length compresses into small holes and holds securely. Made by Elastic Stop Nut Corp., 2330 Vauxhall Rd., Union, N. J., it comes in 13 sizes to fit hole diameters from & in. to & in.

A fork lift truck, called the world's largest by its designer, Ross Carrier Co., 600 Miller St., Benton Harbor, Mich., takes loads up to 12 tons in weight and 92 in. in width.

A metal for battery grids that resists overcharging has been developed by Willard Storage Battery Co., Cleveland.

A flow controller, made by Penn Industrial Instrument Corp., 3116 N. 17th St., Philadelphia 32, is supposed to respond quickly and accurately to flow-meters.

A self-adjusting tool holder, designed by R. K. Products Co., 731 S. W. Front Ave., Portland 4, Ore., uses sponge rubber and 12 aluminum stalls to grip multishaped tools.

A drop hammer control has a treadle push-button that shifts the hammer stroke from full to short, or vice versa. The manufacturer: Chambersburg Engineering Co., Chambersburg, Pa.



This cargo lifter is holding 18 oil drums that weigh altogether 9,000 lb. There aren't any magnets, ropes—or magic. It's all done with a suction device developed by Karl P. Billner of Vacuum Concrete, Inc., Philadelphia. Billner's rig includes a vacuum pump, hose lines, and cargo holders. Measuring 1-ft. in diameter, each holder lifts 900 lb.

HOW TO KILL NOISE WITH YOUR PHONE BOOK



BUSINESS AS USUAL. Your Gold Bond Applicator will sound condition your office at night or on weekends.



BEAUTIFUL RESULTS. A big variety of washable and repaintable surfaces and colors, priced to fit your budget.

You'll build or remodel better with Gold Bond Acoustical Products

SLAMMING doors, clacking typewriters and the steady buzz of people talking can wear your nerves to a frazzle. But you can get rid of these unwanted office noises today. Just turn to the classified section of your phone book and call your local Gold Bond Acoustical Applicator (listed under "Acoustical Contractors"). He's your local expert on the unique Gold Bond 2-Way Sound Control Plan—the most complete sound conditioning service you can get.

Here's how Gold Bond's two-way Sound Control Plan works:

1. EXPERT SERVICE AND INSTALLATION. Gold Bond Acoustical Applicators are located all over the country. Your local applicator will be glad to talk over your noise problem at no cost or obligation to you. He'll tell you which of Gold Bond's five acoustical products is best for the job. And his expert, factory-trained crews will work nights or on weekends so they won't get in your way.

2. FIVE PRODUCTS TO CHOOSE FROM. Every sound conditioning job has its own problems. Your office may have an unusual ceiling design. Or you may have very little money for modernizing purposes. That's why Gold Bond makes not one but five different Acoustical products to cover every possible need and meet any budget.

Your local Gold Bond Acoustical Applicator will gladly show you samples; or write us at Buffalo, Department BW-9.



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Central Roofing Co	Abilens, Tex.
Lydick-Browne Roofing Co	Albuquerque, N. M.
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Lloyd E. Mitchell, Inc	Baltimore, Md.
I. F. Ryan Combany	
Badbam Insulation Co., Inc.	Birmingham, Ala.
Dillaby Fireprosfing Co	
J. M. Sutler Acoustical Co	Charleston, W. Va.
A. A. Metts Co.	
Geo. W. Wallace	
Fisher-Busse Co.	
F. A. Kamb Flooring Co	Cincinnati, Obio
H. A. Erf Acoustical Co	Cleveland, Obio
South Texas Materials Co	Corpus Christi, Texas
Acoustic Builders Specialty Co	Dallas, Texas
Myron Cornish & Co	Dayton, Obio
John C. Reeves & Co	Denver, Colorado
N. H. Wikeland & Co	Des Moines, Iowa
Turner-Brooks, Inc.	Detroit, Mich.
Los Building Specialties Co	Ean Claire, Wis.
Southwest Acoustical Co	El Paso, Texas
General Insulation Co	Evansville, Ind.
Lydick Roofing Co	Fort Worth, Texas
Healey & Popovich	
Northwest Michigan Acoustic	al Co.
•	Grand Rapids, Mich.

Better Homes Inc	
J. A. Walsh & Co	Houston, Texas
General Asbestas & Supply Co	Indianapolis, Ind.
Best Interiors, Inc.	Jackson, Miss.
Jacksonville Tile Co	Jacksonville, Fla.
Enstis Lancaster Associates	Johnson City, Tenn.
Cockerell Engineering & Firepre	ohng Co.
	Kansas City, Mo.
Eustis Lancaster Associates	Knoxville, Town.
Acoustical Engineering Co	
Crawford Door Sales Co	Little Rock, Ark.
The Sound Control Co	Los Augeles, Calif.
Braun Acoustical Co	
Hamilton Roofing Co	Lubboch, Texas
Fischer Lime & Cement Co	Momphis, Town.
Acoustical Contracting Co	Morrill, Wis.
Rowell Flooring Company	Miami, Fla.
Acoustical Sales & Engineering C	oMiami, Fla.
Schauer Co., Inc.	Milwaukes, Wis.
Haneustein Co	Minneapolis, Minn.
Gold Bond Acoustical Co	Mobile, Ala.
Building Specialties Co	. Moorbead, Minn.
National Acoustics	
Febre & Co	Norfolk, Va.
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Acoustical Sales & Plaster Co. Of	

Porter-Trustin Co	Omaha, Nobrasha
	t. Co Pharr, Texas
Chas. M. Wall, Inc.	Philadelphia, Pa.
Standard Floor Co	
	Richmond, Va.
	Rosnoke, Virginia
	rings, Inc Rockford, Ill.
L. H. Clawson Co	Sacramento, Calif.
Usab Pioneer Corp	Salt Lake City, Utah
Heat Control Insulation C	San Antonio, Texas
Morrison-Hope Co	San Bernardino, Calif.
Northwest Sound Control	Ca. Inc. Seattle, Wash.
J. Tom Harrison Co	
Midwest Acoustical Co	
Rhodes-Rodier Co	
Queen City Wood Works	
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Missouri Builders Specials	
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J. F. Millery Co.	D C (A-1)
A. W. Lee Co Wash	
Northern Steel Buildings,	
Solf Linoloum & Shade Co	., Inc Wichita, Kans,
Waster Assessing & Insul	Co Vananciana Ohio

CANADA: William G. Kerr Toronto, Ontario

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American
can help you
with floor finishing and maintenance problems from
A to Z-with new
specification sheets
... a handy 3-foot chart
complete new line of

... and a complete new line of quality floor materials for every kind of floor and every desired result!

Complete detailed specificaspecification tions on each finish, maintenance and cleaning material for building maintenance men, floor contractors, architects and builders.

NEW
3 FOOT
CHAPI A handy referen

CHARI, A handy reference to help you in estimating coverage, drying time, selection of materials and other important data for ALL Floors.

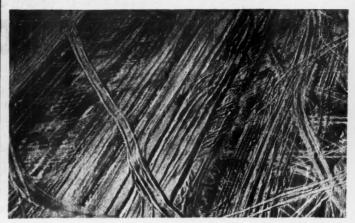
LINE OF American's new complete line gives you the correct many complete line gives and the correct many control in the correct many control i

FLOOR complete line gives you the correct material—in the finest quality—for each type of floor. Seals, finishes, waxes and cleaners for every requirement—glossy or satin—fast-drying or normal drying—right for long life and easy maintenance!

SEND for free 3-foot chart... also new complete file on finishing floors. The American Floor Surfacing Machine Co., 551 So. St. Clair St., Toledo 3, Ohio.

AMERICAN FLOOR SURFACING MACHINE CO.

CONSTRUCTION



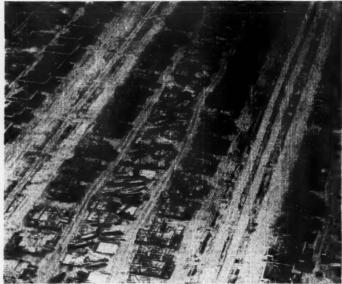
EARTHMOVING JOB involved more than 3-million cu. yd. for drainage, streets, sewers, and water supply. The level tract made drainage the hardest part of the job.

New Homes: 1,000 a Month

Los Angeles watches 17,000-home development spring from vacant tract on 18-month schedule. It will cost \$135-million, will house almost 70,000 people in Los Angeles County.

Lakewood Park, in an unincorporated section of Los Angeles County, is described as the world's largest planned housing development. This 17,000-home

venture will cover 3,400 acres, will be served by 380 mi. of streets and 340 mi. of sewers, the latter emptying into facilities of the Los Angeles County



FRAMING is done by new methods aimed at speeding work. All lumber is delivered in one truckload. Shingles go to roof by conveyor belt. All plumbing is shop assembled.



CONSTRUCTION TIMETABLE is key to success. Ditchers excavate foundation walls. Concreting is in reusable forms. Precut lumber is delivered to the job site as needed.

Sanitation Districts. There'll be parks, playgrounds, schools, churches, and a major shopping center with department stores, shops, and supermarkets. Stores will get deliveries through tunnels, to cut traffic on shopping streets.

Some of the project's side effects are as startling as the job itself. It has drawn so heavily on construction labor and materials in the area that smaller contractors have had to offer bonuses and above-scale rates to obtain either. Impact on agriculture is just as noticeable. As this and other large housing ventures have withdrawn land from agricultural use, Los Angeles County farming income has slipped. For a decade or more, the county has been first in agricultural income in the U.S. It fell behind Fresno County last year under the impact of land withdrawals.

Biggest engineering problem at Lakewood Park has been drainage. The tract is flat and subject to occasional heavy rains. So streets are the main medium for removing storm runoff.



IT'LL LOOK LIKE THIS on completion. Homes have two or three bedrooms, one- or two-car garages. Prices run from \$7,575 to \$9,075. Home sizes are 850 and 1,050 sq. ft.



BASED ON ELWELL-PARKER'S 44 YEARS' EXPERIENCE,

this pictorial study is entitled "Industrial Logistics". It shows how you can save time, increase safety, and make NEW profits in Procurement, Production and Distribution. The illustrations present a preview of the materials handling pattern that the man can establish for you.

Learn about the savings being made by over 50 types of Elwell-Parkers (both gas and electric powered) in 300 branches of industry. For your copy of "Industrial Logistics", write The Elwell-Parker Electric Co., 4009 St. Clair Avenue, Cleveland 3, Ohio.

> Special Booklets also available for these industries:

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build your own RACKS the quick UNISTRUT WAY and Save!



Let this NEW Free Catalog help you

of this new 24-page fully illustrated Catalog No. 600

Build any kind of racks your business requires - pallet racks, furniture racks, die and bar

stock racks, display racks, wire and cable reel racks, glass racks,

general storage racks and miscellaneous types of shelving,

work tables, benches, conveyors, and mounts. All can be built by

anyone with just two simple

tools - a saw and a wrench.

Get Space Conserving, Time

Saving, Low Cost Storage

for any type Product or Material.

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No Special Skill Required!

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DISPLAY BACKS AND SHELVING







DIE BACKS





Unistrut is designed to help solve your storage and materials handling problems, and lower your costs, by conserving valuable floor space, cutting your labor and handling expense and providing a construction material you can use again and again without additional investment. Unistrut is in use today in thousands of factories, mills, warehouses, laboratories, shops and storerooms of hundreds of the world's largest and most progressive companies. Give Unistrut a trial in your business.

THE 3 QUICK UNISTRUT STEPS







1. Insert Nut

UNISTRUT PRODUCTS COMPANY 1013 West Washington Blvd. . Chicago 7, Illinois

npt Delivery from Warehouse Stocks in Principal Cities - Consult Your Telephone Directories

READERS REPORT:

Chrysler Came Earlier

I notice with interest [BW-Jul.22 '50,p36| that York Corp. is introducing on the market a residential air conditioner which can be installed for under

I would like to call to your attention that we have been installing Chrysler Airtemp equipment in that price range for a number of years; in fact, I installed my first one in 1944.

THEODORE M. WILLIAMS THEODORE M. WILLIAMS CO., DAYTONA BEACH, FLA.

Pro Johnson ...

In reference to your editorial on Johnson [BW-Aug.5'50,p96]: My reading of the news has left the distinct impression that the President and the Secretary of State published to the world our intention not to defend Korea. If that be true (I mean as to policy), was not the Secretary of Defense obliged to dispose the military forces accordingly? That could account for no plan and for no men, weapons, or materials close enough to be effective upon our change of policy at the start of the Korean war.

Mr. Johnson has made mistakes, but he has shown firmness and decision when the controversies in his department "developed more heat than light." Those can be very valuable qualities in an emergency. If he employs them wisely from this time forward, he can

be of great use to us.

HERBERT E. SNYDER

CLEVELAND, OHIO

... and Con Johnson

Sirs.

Congratulations on your hard-hitting and forthright editorial demanding the resignation of Louis Arthur Johnson as Secretary of Defense. After nine weeks of desperate fighting in Korea, U.N. troops are still in a tragically precarious position, thanks to the utter failure of Secretary Johnson to plan an adequate defense policy or organize sufficient military strength. It is imperative that an outstanding job be done immediately to repair the damage done by Johnson. Only political selfishness is keeping this man in office. It is up to the public forcefully to demand and obtain his esignation.

WILLIAM A. HEWITT

SAN FRANCISCO, CALIF.

The Marki's Mast Flevil

All-Perpose Motel Framing

Cummins Custom-built Diesels

Built not once but

Truice

Delivers power at lower cost because it's better built

There's more useful power life built into every lightweight, high-speed Cummins Diesel, because every engine is actually built twice. After initial assembly, each engine is run in on the test block. Then it is torn down and carefully re-inspected—after that it is re-assembled and tested again.

Extra care is maintained throughout production. This precision, plus such extra features as the Cummins exclusive fuel system, means peak performance, less "down-time" and more rugged, dependable power for every fuel dollar spent.

There's a model engineered for your power needs. Contact your Cummins dealer. He has more facts to show you about making more profits with...

Diesel power by **CUMMINS**

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Lightweight High-speed Diesel Engines (50-550 hp) for: On-highway trucks off-highway trucks - buses - tractors - earthmovers - shovels - cranes - industrial locomotives - air compressors logging yarders and looders - drilling rigg - centrifuga pumps generator sets and power units - work boats and pleasure craft,





A manufacturer of electrical equipment standardizes on MOSINEE — "more than paper" — because of its uniformity. This enables him to obtain exactness of his finished product without having to adjust his processing to paper variations.

This manufacturer knows he can rely on the dependable uniformity of MOSINEE. Such dependability may help you solve your problem. Write Dept. BW and MOSINEE "paperologists" will be glad to confer with you without obligation.

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Essential Paper Manufacturers

MARKETING



MIAMI GAMBLERS and lawyer (second from left) await Senate hearing.

Black Marketing Lures Gangs

Coming of shortages opens lush new field for criminal "investors," and spurs Senate to dig deeper into nationwide crime syndicates.

When a gangster goes "legitimate," he usually gets into some phase of marketing. The pattern was set back in the early '30s, when prohibition forced gangsters out of bootlegging into gambling. To hide their operations behind "fronts"—and to earn a quick buck as well—they moved into hotels, restaurants, whiskey distribution, and similar businesses.

• Era of Shortages—That's what makes the hearings now being held by Sen. Estes Kefauver's Senate crime investigating committee so timely. We're moving back into an era of shortages and that means a return to the bad old days of profiteering and black marketing. As Harold Robinson, chief investigator for the Senate committee, has put

"There is much unorganized petty black marketing activity. But much major black marketing is controlled by criminals. Who else has the capital?"

The gangsters have plenty of capital. Their annual take from nickel slot machines, horse-race betting, roulette wheels, and other gambling rackets has been reliably estimated at \$17-billion—at least.

• Syndicate—But this is only one facet of the committee's investigation. The California Crime Commission and several other investigations have established convincing circumstantial evidence that a nationwide crime syndicate exists. The Senate committee hopes to prove it.

• Hard to Prove—That isn't an easy job. The use of cold eash in all transactions; the absence of records; the extensive use of "fronts"; and rapidly shifting alliances, agreements, and operations make organized crime infinitely complex to trace. The most ramified legitimate cartel appears simple by comparison. In its first report, after an initial peek at gambling rackets in Florida, the Senate committee said that gangsters have made inroads into a number of fields: auto dealerships and distributorships, small steel companies, utility companies, banks—anything "in which large amounts of cash are handled or which have had black-marketing potentialities."

• Wire Service—One of the committee's key targets is Continental Press—which claims that it is merely a disseminator of horse race and other sporting news. The California Commission on Organized Crime, the Chicago Crime Commission, and other investigating bodies have called it the spinal chord of organized crime. Continental is said to be controlled by the heirs of the Al Capone gang, top dogs in the gambling rackets.

The committee hopes that its study of Continental and the men connected with it will cast light on the legitimate

The "drive" behind the "power" of a woman



Milady may not know it, but Raybestos-Manhattan plays a mighty important

role in her life. Her favorite fabrics are woven on looms driven by V-belts probably made by R/M. And whether they be rayon, nylon, cotton, wool, or silk, the yarns are spun on frames, most likely driven by these same dependable belts. Textile-mill men like and rely on these belts. Their stretch-resisting, load-supporting drive helps maintain a steady flow of production.

The entire R/M rubber belting line—either V or flat transmission, and ranging from belts for the smallest appliances to multiple belts for huge machines—is stretch-resisting, shock-absorbing and long-lasting. But perhaps you haven't got a belting problem. All right, then, what is your problem? Your trucks or buses are not giving satisfactory brake block performance? You want to line a 20,000 gallon extraction tank with rubber? You have an asbestos cloth problem? Your industrial rubber hose is wearing out too soon?

Whatever your problem, if it has anything to do with asbestos or rubber, call in an R/M representative. Raybestos-Manhattan is known the world over for its wide experience and great versatility in both of these fields. Almost every phase of industry—indeed almost every individual—is served by something R/M makes in its four great plants and laboratories.

Simply write to Raybestos-Manhattan, Inc., Passaic, New Jersey.

RAYBESTOS-MANHATTAM, INC.



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MANUFACTURING DIVISIONS

General Asbestos & Rubber Division No. Charleston, S.C. Manhattan Rubber Division Passaic, N.J. Raybestos Division Bridgeport, Conn. U.S. Asbestos . . . Grey-Rock Division Manhaim, Fa.



.. Mark of PROGRESS in Railroading



They're not too fat for us!

OMPARE the man in the picture with these sections of a carbon black precipitator and you see that here obviously is an oversize shipment. With a height of 17 feet and a width of 13½ feet, careful check must be made before shipment—for a very good reason!

Many oversize shipments like this are routed over the Erie because of the extra-big clearances in tunnels, bridges and curves along its right of way. The Erie is famous for having the highest and widest clearances of any eastern railroad. This advantage, added to Erie's famed heavy-duty roadbed and Erie's progressive railroading, explains why so many shippers say "Route it Erie!"—the railroad with a fine record of service in the safe, dependable transportation of both passengers and freight.

Erie Railroad

Serving the Heart of Industrial America



business activities of the gangs as well as their illegal doings.

• Defender—At Senate hearings early this year on legislation to ban the interstate transmission of gambling information, Continental was represented by Walter Gallagher. He's former assistant to Attorney General Homer Cummings and former law partner to Gordon Dean, now chairman of the Atomic Energy Commission. Gallagher vigorously opposed the legislation which would put Continental out of business. Action on the measure is being postponed until the crime committee compictes its investigations.

Here is some of the evidence presented before the committee on the invasion of legitimate business by gamblers with criminal records:

• Hotels. Many of the exclusive resort hotels and clubs in the Miami area are financially controlled by gamblers, some of them ex-convicts. Among them are Jake Lansky, Frank Erickson, Joseph Massei, Phil Kastel, Frank Costello.

• Meat distribution. Massei, with a long police record, including several murder charges, is 50% owner of the Miami Provision Co., the big meat company of the area. Investigator Robinson remarked: "I don't think many hotels and restaurants in the area would refuse to buy meat from Miami Provision Co., and I think it might be rather rough on anyone who decided to go into competition with it."

 Clothing. Nig Rosen, who has a criminal record and figures in Miami gambling, operated the Dearest Miss Dress Co. in New York.

 Liquor distribution. Frank Costello for 10 years after prohibition had an income of \$35,000 a month in commissions for distributing Scotch.

 Candy Maker—At one hearing, the Senate committee lifted the curtain on what gangster infiltration means to business. This is the evidence:

business. This is the evidence:
David Lubben, merchandiser for Kroger Grocery Co., decided to go into the candy business for himself in New York. He set up Eatsum Co., started off as a repacker and distributor, then bought machinery to go into manufacturing. He was driven into the black market for sugar. A "connection" lined him up with a New York team, William Giglio and Frank Livorsi, linked with Frank Costello. For 50% ownership, at \$45,000, they promised ample sugar. No sugar was ever supplied. The company engaged in black market rackets and as a go-between, purely for price markup purposes, for the Tavern Fruit Juice Co. owned by Giglio and Livorsi. Tavern "sold" syrup to Eatsum, which marked up the price 15%, and sold to bakeries.

Hoodlums frequented the premises. Lubben became "afraid" and "wanted



"John doesn't catch much . . .

but I'M GLAD HE'S FISHING!"

"John was with us a long time. He was a valuable man and I relied upon him a great deal. He had one weakness though; he liked to tell tall tales about his fishing prowess. But he loved the sport, and we admired his stories when he'd return from a fishing trip.

"It was while on one of those trips that John was permanently injured and now can no longer walk. He moved his family to a place where the sun shines daily and the fishing is always good, so he says!

"What's really good about this story is that John and his family have security. Thanks to our Connecticut General Business Accident and Health program, he will continue to receive a large part of his salary as long as he lives. And thanks to this plan, we could afford to replace John with a man of equal caliber."

Call your nearest Connecticut General office, or your own insurance man for all the facts about Connecticut General Business Accident and Health protection. It answers a broad range of business problems.





Approved Protection for oil filled electrical equipment

Fire damage to transformers can seriously curtail plant operations and result in high cost equipment losses and out-of-service time. That's why you'll be using good judgment when you make sure that your oil filled power generating equipment is safe from fire 24 hours a day, every day of the year.

You can get this protection by specifying *Automatic* FIRE-FOG, for when fire breaks out, FIRE-FOG goes into action instantly . . . automatically . . . stops the fire quickly and surely.

Specifically designed for your particular risk, *llutomatic* FIRE-FOG is electrically safe and carries the approval of all leading insurance authorities.

Better get in touch with an **Culematic Sprinklev* fire protection engineer for details on FINE-FOG and other types of fire extinguishing systems. Name your hazard—we'll protect it!



AUTOMATIC" SPRINKLER CORPORATION OF AMERICATION OF

"Automatic Sprinkler

FIRST IN FIRE PROTECTION

MANUFACTURE INSTALLATION

MANUFACTURE INSTALLATION

OFFICES IN PRINCIPAL CITIES OF NORTH AND SOUTH AMERICA

to get out." Eatsum had \$940,000 in assets. Lubben got nothing, except the original \$45,000 for the partnership. He was afraid to take the case to court, testifying, "If a man has a gun, you don't want to tempt him to pull the trigger." He said he had been told Costello was "the real boss" behind Giglio and Livorsi.

MARKETING BRIEFS

Eastman Kodak thought that dealers' orders for black and white sheet film "were exceeding normal requirements." So it canceled all back orders, told dealers to start afresh. Eastman promised the dealers everyone would get as much film as he has in the past few months—"if we work together."

Cigarette demand has kept Philip Morris factories working around the clock. Now the company has decided on an \$11-million plant expansion program in Louisville.

Dentocillin, Andrew Jergens' new tooth powder containing penicillin, is getting a prestige buildup. It will be available at first only through prescription.

Coupon gimmick: Small Richmond (Va.) independent stores are giving Travelette coupons with each purchase. For every dollar spent, customers get a coupon that entitles them to one mile of public transportation.

More moonshine distilleries were seized by the Bureau of Internal Revenue in the 1950 fiscal year than last year— 10,029 as against 8,008.

Bovril, Britain's famous beef extract, is getting a heavier whack at the U.S. market. It's being backed by a "full-scale" marketing and advertising effort.

Hosiery mills are beginning to come back on the market with nylons. The new prices are about what the trade thought. Those that used to retail at \$1.35 a pair are up to about \$1.50; the \$1.50 grades are up to about \$1.65.

More blended fabrics using a greater proportion of rayon will hit the market because of skyrocketing wool prices. Example: American Woolen's latest offering, a 60-40 rayon-worsted gabardine.

National advertising expenditures in July were up 13% over July, 1949, according to the Printers' Ink index. This was due, in part at least, to pre-korea momentum. June's figure had also beat the year before.

BUSINESS IN MOTION

To our Colleagues in American Business ...

The geometric form that combines the maximum volume with the minimum surface is the sphere. This fact has been obvious to man for centuries, but it was only a relatively few years ago that this principle was applied to a domestic water heater. It was reasoned that if a heater had a spherical tank. it would lose less heat by radiation than the conventional cylindrical tank. The theory was absolutely correct, but as is so often the case, making it practical was not easy. A sphere can of course be

built up of segments, but that is a costly process, and in order to make a heater that would be competitive, as well as have maximum heating efficiency, it was desired to make the sphere in two halves and weld them together, with a central tube for the flue, which would heat the water from the center out instead of from the outside in.

In order to obtain easy weldability, plus the corrosion resistance of copper and the strength of mild steel. Herculov was chosen. This is Revere's silicon bronze.

Welded tanks made of it are non-rusting, longlived, and easily meet code requirements for a 300pound pressure test. The manufacturer who undertook production of this tank was exceptionally well staffed with metallurgical, design and fabrication engineers, so much so that it would have been logical to believe they could solve all the inevitable problems without assistance. Nevertheless, they asked Revere to collaborate with them, probably feeling, we believe correctly, that Revere's knowledge and experience added to their own would materially shorten and facilitate the work required to set up successful production methods.

One subject of examination was the drawing of flat sheets into hemispheres, which requires correct drawing sequences and anneals. Studies were made of the furnaces in the customer's plant, and the correct temperatures and annealing times were worked out together, so that the proper tempers were produced. Then the welding process was studied mutually with Revere's Welding Department. Methods, current densities, welding times and other factors involved in establishing a proper welding

> sequence were specified. Later, new welding techniques, such as the hydrogen-shielded arc, were incorporated.

The domestic water heater that resulted from this exceptionally thorough engineering job is extremely efficient in its use of fuel, and in its conservation of heat through reduction of radiation. It is reported that stand-by losses are so low that they are made up by the small amount of heat from the pilot, when no water is being drawn off. That is operating econ-

omy, while savings are also afforded by the nonrusting silicon bronze tank, an especially important factor where water conditions are such as to destroy

ordinary metal quickly.

This case history of close collaboration is especially pleasing to Revere, because of the high degree of engineering talent employed by the customer. It paid even him to look outside as well as within for knowledge and experience. So we suggest that whatever it is you make it will pay you to ask your suppliers to add their knowledge to your own. They will be glad to do so, and the result may be pleasing and profitable indeed.

REVERE COPPER AND BRASS INCORPORATED

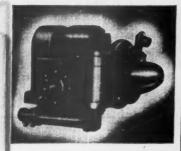
Founded by Paul Revere in 1801

Executive Offices: 230 Park Avenue, New York 17, N. Y.

America's most advanced oil burner

HEAVY FUEL OIL

(NO. 6 OR LIGHTER OILS)



IRON FIREMAN

New principle of precision oil control for heat-rich, low cost heavy oils

The sluggish heavy oils, low in cost but high in heat value, can be fired with utmost precision and dependability in the Iron Fireman rotary oil burner. Through thick or thin, the revolutionary Iron Fireman Oil Volumeter feeds oil evenly to the nozzle. The flame is steady and uniform, even when throttled down to 20 per cent of capacity.

Oil-Gas-Coal combination

The Iron Fireman rotary oil burner combines perfectly with the Iron Fireman industrial gas burner and pneumatic spreader coal stoker. Fuel change is accomplished quickly. Protects your plant against high fuel prices or shortages.

For further information write to Iron Fireman Mfg. Co., 3231 W. 106th St., Cleveland 11, Ohio. Other plants in Portland, Oregon; Toronto, Canada. Qualified dealers throughout the U. S. and Canada.



Can you afford to wa what Iron Fireman users are saving?

IRON FIREMAN

Automatic Firing with OIL, GAS, COAL



STANDARD BUILDINGS, set in accessible outskirt areas, streamline Omar's distribution of house-to-house baked goods. All 28 plants look just like this one.



OMAR ROUTE MEN take their appearance more seriously since moving into new plants. It's because they want to live up to their new surroundings, the company says.

How to Grow-With Speed

Omar's expansion program was blocked by poor branch locations in old buildings. Standardized prefab plants are now helping Midwest baker step up sales in six states.

In most industries, it's relatively simple to expand distribution: You increase production and add more salesmen. But sometimes, plain lack of speed blocks an otherwise easy program.

• House to House—Two years ago, Omar, Inc., midwestern giant in the house-to-house baked goods industry, wanted to speed its sales expansion program. The way to boost sales, obviously, was to pump up business on existing routes and to add new routes.

But Omar's distribution setup wasn't geared for the job. The company's 19 branch plants and bakeries were scattered over a five-state area. All the branch plants were rented—some of them had been garages, livery stables, and other buildings completely unsuited to a distribution operation.

 Poorly Located—While most of the branch plants were located within transport-truck reach of one of the five bakeries, they weren't easily accessible.

Most were in heavily traveled downtown districts. Route men and transport trucks got snarled in traffic. So Omar decided on a complete streamlining.

Omar started this job early in 1949. By next month, workmen will be put-















EXECUTIVE OFFICE - Blaw-Knox Company, 2104 Farmers Bank Building, Pittsburgh 22, Pa.

OFFICES IN PRINCIPAL CITIES -Export Department, 342 Madison Ave., New York, N.Y. Distributors and representatives throughout the world.

THE engineered products and engineering services of Blaw-Knox are contributing to industrial progress internationally. We invite an engineer-to-engineer discussion to determine if these products and services can be helpful to you in meeting changing production conditions.

OPERATING AND SALES DIVISIONS

OPERATING AND SALES DIVISIONS

BLAW-KNOX * BLAW-KNOX * SPRINKLEP * BUPLOVAK EQUIPMENT

BUPLOVAK MIDWEST CO. * CHEMICAL PLANTS* * THE FOOTE COMPANY, BIC.** * LEWIS FOUNDRY &
MACHINE * NATIONAL ALLOY STEEL * PITTSBURGH ROLLS * POWER PIPMO* * UNION STEEL CASTNOS

**Therefor as a division of Blaw-Knox Construction Company **Subsidiary of Blaw-Knox Company



ting the finishing touches on the last of 28 branch plants—all of them so much alike in plan that a route salesman from any territory can walk into any of the buildings and know where everything is. But they're now spotted in outlying districts, close to the routes and accessible to main highways so transports can reach them easily.

Most of the 28 plants replace old rented buildings. Several new territories have been added, and a sixth bakery was acquired in Peoria, Ill., to spread "Omarland" over a six-state area.

• Standard Plans—Standard buildings account for the speed and economy with which Omar revised its distribution setup. Original plans called for an outlay of \$8.50 per sq. ft. for conventional masonry buildings. By using standard buildings, that figure was whittled down to \$5.70 per sq. ft., and in the case of some of the larger buildings, \$4.00 per sq. ft. (Sq.-ft. expense includes bakery remodeling.)

Omar engineers worked with Luria Engineering Corp. to develop three standard floor plans that could be rejiggered to meet size requirements of the various plants. The buildings have an identical width—110 ft. Length can be varied from 68 ft. to 268 ft., by adding 20-ft. standard sections.

• Local Contractors—Luria shipped the prefabricated buildings to the plant sites, and local contractors erected them. Omar found that by using standard buildings it could complete a building in three months.

All the buildings have kindred features. There are facilities for storing gasoline underground. Each building has a side-door loading dock.

• Conveyors—Checking in and out each day and returning unsold goods was a time-consuming job in the old rented plants. So each new building has a specially designed returned goods setup. Drivers park their trucks directly opposite a conveyor, unload the goods onto it and then enter the check-in room to make out their reports.

Each building has a manager's office, meeting room, washrooms, and a utility room, plus space for servicing, repairing, and storing panel trucks.

pairing, and storing panel trucks.

• The Cost—Omar's three-year expansion program added up to \$9,480,000. Of that, \$2,560,000 have been spent on branch plants, with \$550,000 still under contract. New equipment for all six bakeries, and remodeling at three bakeries, at up \$3,570,000. New transportation equipment cost \$2,800,000.

The program has paid off. In the fiscal year 1949, Omar sales ran over the \$25-million mark. This year, they're expected to reach \$28.5-million. Since 1947, the number of routes has nearly doubled to the present total of 1,200, and number of branch and plant sites has jumped from 19 to 39.



IF YOU WEAR GLASSES try Sight Savers and see how exceedingly well silicones clean, polish and protect eyeglasses. SIGHT SAVERS are Dow Corning Silicone treated to KEEP YOUR GLASSES CLEANER.

10c at all drug and tabacca counters.

World's No.1 Office

Typewriter!

No. 1 in Features!

More exclusive, work-saving, time-saving features than any other typewriter!

No. 1 in Speed!

The world's fastest standard typewriter!

No. 1 in Writing Ease!

The easiest-writing standard typewriter ever built!

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Preferred by typists 21/4 to 1 over any other make of standard typewriter!

No. 1 in Durability!

Royals stay on the job longer with less time out for repairs!



Look at these 4 great Royal advantages!



Exclusive ⁶⁴ Magic⁷⁷ Margin, lets you position the carriage, shek the lever, and your margin is set.



Cradle your finger tips on the Finger-Flow Keys. Notice the greater clearance between rows.



Quick cylinder change! Just press and lift out with thumb and forefinger of right hand. It's a cinch.



You slip the ribben loop or without even removing the empty

The above features—and many others—are good reasons why you should call your local Royal representative and say: "I want an Office Trial of the Royal right now!" There is no charge or obligation, of course.



STANDARD and ELECTRIC

Made by the World's Largest Manufacturer of Typewriters
"Magic" is a registered trade-mark of Royal Typewriter Company, Inc.



How a feller wins a friend

Seems as if every puppy just naturally has the knack of making friends. Perhaps one reason for his success is his ability always to select a responsive audience.

And when companies employ institutional advertising to win important friends, they want to make sure of their audiences, too. For it's vital that institutional messages be read by people who are well-prepared to absorb ideas . . . and to pass them on to others.

That's why you'll be interested in this important fact:

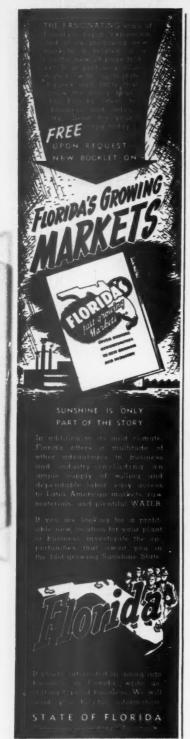
Of 10 institutional advertising campaigns running in
The American Magazine and one or more other leading
magazines...all 10 got their highest readership—among both men
and women—in The American Magazine!

This survey reflects the character of the magazine which attracts the most powerful group of opinion-makers in America today—the more than 2,500,000 intelligent, responsive families who read The American Magazine.

We have a complete and convincing presentation of all the facts to show to any of your executives or to your advertising agency.



THE CROWELL-COLLIER PUBLISHING COMPANY, 640 FIFTH AVENUE, NEW YORK 19, N.Y. PUBLISHERS OF THE AMERICAN MAGAZINE, COLLIER'S, AND WOMAN'S HOME COMPANION



Coal Fights to Regain Home Market

Cleveland dealers seek to halt shift to gas and oil, offer new heating services to householders.

Gas and oil have been riding high since the end of the war. More and more domestic and industrial users have switched from coal to the other fuels—encouraged by rising coal prices and frequent strikes.

Home owners particularly have been enthusiastic customers for fuel oil and gas—no shoveling, no ashes to carry out, regulated heat at the flick of a

thermostat.

• Worm Turns-Coal dealers, for the most part, have sat back and watched their business slide. But in Cleveland and northeastern Ohio, some of them got tired of facts like these: In 1949, less than 5% of the 8,860 single homes built in the Greater Cleveland area were equipped with coal furnaces. That same year, 20% of the area's 1948 coal customers switched to gas or oil.

Last spring, a dozen or so of the area's coal dealers plus the local coal dealers' association undertook to turn the tide back to coal. A long, careful look at the services they provided convinced dealers there was room for

improvement.

· Dirt Eliminated-For example, customers often complained they didn't get the exact quality of coal they had ordered. And when it was dumped into the bin, it made a mess. That one was relatively easy. The coal producers were encouraged to size and clean coal properly, and retailers added another cleaning treatment before the almostdustless coal was delivered to the customer. Along the same line, deliverymen were chosen with more caredealers didn't want coal spilled all over customers' lawns. Oversized trucks that damaged private driveways were also barred.

• Direct Approach—Then the customers were approached. Dealers wrote letters asking for orders, followed them up with phone calls and personal visits. They took a leaf from the oil dealers book and inaugurated a furnace inspection service. The dealers' furnace experts inspected customers' furnaces, advised them if repairs were needed, and gave them an estimate of how much the repairs should cost. If the repairman charged more, the coal dealers' association brought pressure for an adjustment. And customers were also given advice on the proper fuel to

Clincher of the campaign was in financing. Customers were urged to fill their coal bins during the summer months and pay for it on a monthly or quarterly basis. Most of the dealers carry the customers' paper themselves, with help from the coal producers. Some deal with banks or finance companies.

• Better Heat—The dealers plugged hard on two selling points: the better-quality heat and the inexhaustible supply of coal. (Actually, coal strikes usually cause industrial, not domestic, coal users to suffer.) The campaign paid off. Coal dealers in the area sold more domestic coal during July and August than during any summer stocking-up period in the past decade. And they held on to practically all the customers they had last spring.

But the dealers aren't satisfied just to hold their market. They want to pull in customers who have switched to other fuels and snag a share of new-

home customers.

• Natural Gas—To do that, Cleveland coal dealers say they are going to need some practical help from the coal industry. Coal is at a price disadvantage in the area. Natural gas rates are the lowest in the country, except for those in Kansas City and San Francisco.

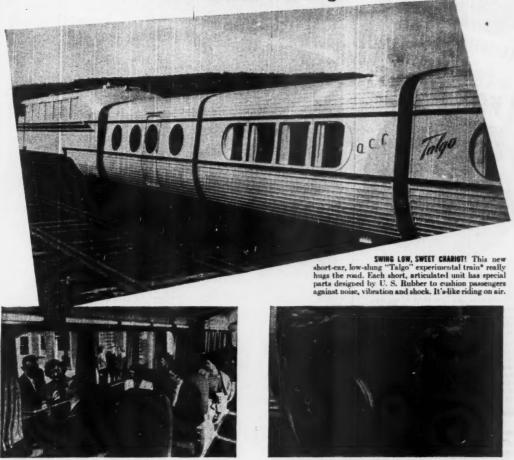
But coal men have an answer to that:
"What do you think the Big Inch and
Little Inch pipe lines will be transporting in the event of a full-scale war?"
(Those pipelines carried oil during the
war, now move natural gas.)

Coal dealers think they'd have effective selling ammunition if the automatic bituminous-burning furnace they have been promised would materialize. Coal operators have financed research on such a furnace for years. But so far, they haven't been able to develop a furnace that will burn satisfactorily with all grades of bituminous coal—and the industry won't accept anything less than that.

• Milwaukee-Cleveland coal dealers aren't the only ones campaigning for greater share of the home-heating market. Milwaukee's North Western-Hanna Fuel Co., a subsidiary of Pittsburgh Consolidation Coal Co., has hired a crew of girl students from Marquette University's merchandising school to visit all the homes in Milwaukee. Technically, the girls don't sell coalthey "educate consumers." But their house-to-house campaign has brought an encouraging number of orders, the company says. In addition: "People tell us they are happy to see the coal industry coming to life and showing an enterprising spirit," says H. G. Krause, North Western-Hanna Fuel Co.'s manager of domestic and commercial sales.

REVOLUTION ON THE RAILROAD

New-type train designed for more comfort and safety is cushioned on U. S. Rubber Mountings



SEEING EYE TO EYE are these passengers and the persons standing outside. Low center of gravity makes for more stability. Each car has only 2 wheels, is supported by U. S. Rubber Special Coupling unit on the car ahead.

INSIDE STUFF. Specifically designed U. S. Rubber parts are used in this wheel assembly and spring suspension. They give a smoother, quieter, safer ride. You can't beat rubber and "U. S." experience on jobs like this.

The "Talgo" train is another example of a manufacturer handing a problem to U.S. Rubber Company engineers and letting them apply their research data and facilities to the job. It will pay you to take advantage of "U.S." experience and advice. Write for free new brochure, "This is Your Laboratory." It tells about U.S. Rubber's vast new research facilities at Fort Wayne.

*(3 built to date)



UNITED STATES RUBBER COMPANY

MECHANICAL GOODS DIVISION . ROCKEFELLER CENTER, NEW YORK 20. N. Y.



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We have the most modern equipment and the know-how for DESCRIPCE EXAMPLES STAMPING DRAWING GALVANIZING PORMING TRIGUIGS SPRAY FINISHING WELDING

ERAD COATRIC VITREOUS ENAMELING Facilities include complete machine shop and tool and die department.

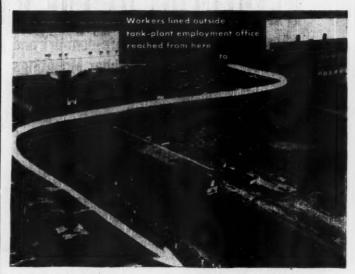
Write for your capy
of our booklet...
SCIENCE AND SKILL
IN SHEET METALS.





GEUDER, PAESCHKE & FREY CO.

CITIES



JOB LINE at Cadillac, Cleveland, was so big MP's had to be called out to help police,

War Job Scramble Starts

Across the country, war industries are again beginning to change the complexion of cities. The trends under way, as in 1940, may shift the economic center of gravity for many communities. Certainly, some of the biggest changes will come from movements of the labor force. This week, BUSINESS WEEK reports on events in two cities—Cleveland and Wichita—after war orders came to town.

I. Cleveland

In the middle of August, Cadillac Division of General Motors Corp. took over the World War II bomber plant near Cleveland's municipal airport (BW-Aug.19'50,p28). It planned to convert the factory to production of medium tanks. It figured it would need 5,000 to 6,000 workers once assembly lines started rolling.

Cadillae frankly had doubts whether it could scare up that many workers in the Cleveland area. When it decided to accept job applications, it expected no more than a modest turnout. What Cadillae got was a crowd that made the plant gate look just like the bleacher entrance for an Indian-Yankee double-header.

When William S. Chisholm, personnel manager of the new operation, looked out his window on the morning of Aug. 21, he saw more than 8,000 men and women waiting in a job line. To one oldtimer, it seemed like 1914. "Put some celluloid collars on those guys," he said, "and you have a Ford

five-dollar-day crowd all over again."

• Reasons—What caused the rush? Moving up and down the line, you heard all sorts of reasons why people wanted to build tanks. Some said they wanted to get on a daylight shift; others liked the idea of starting out in a new plant and getting in on the ground floor. A few of the draft-eligibles were more blunt. "It's better to make a tank than ride in one, isn't it?" they asked sheepishly.

Fully 70% of the applicants came from the immediate Cleveland area. To Cadillac's embarrassment, however, there were scores of factory and skilled workers from Detroit's GM plants. In addition, there was the usual quota of migrant workers from West Virginia, Kentucky, and Tennessee. A large part of the skilled workers had quit their old jobs before the march to Cadillac began. • No Migration-All the same, Cleveland employers don't feel this is a repeat of the Jack & Heintz type of migration of the last war. No Cleveland industrialist is greatly worried over losing skilled help to Cadillac; he only feels sorry for his competitor across the street

YOU GET <u>50% MORE</u> FROM SYLVANIA FLUORESCENT TUBES!

2-YEAR TESTS PROVE SYLVANIA'S SUPERIORITY





- at Sealing Jaws
- ler Sealing
- ess Covers
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- w Temperature

special characteristics:

Temperature resistance (Range -100°F to +500°F)

Resilience over the entire temperature range

Resistance to oils and many chemicals

High dielectric strength

COHRLASTIC is available in 36" rolls of various thicknesses, and different constructions. Write for technical data sheets and specific information regarding your and use

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OU KNOW.. That it's possible

TO GO THROUGH MANY HEATING SEASONS WITHOUT UNIT HEATER MAINTENANCE EXPENSE, providing that yours is a GRID installation? It's possible, and is being done by major industrial plants, steel mills, railroads, etc. who have investigated and installed GRID equipment. It's possible because:



GRID

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iron construction withstands corresive

fin spacing facilitates easy cleaning.

will withstand steam pressures up to 250 lbs., and is free of electrolysis.

fins are cast integral with the steam chamber assuring even distribution of heat. It's not possible for GRID fins to come loose from the learn chamber to cause loss of heating

in incorporating proper fan sizes, motor is and outlet temperatures results in a rly balanced heating unit, especially when iteam pressures are used.

No other unit heater incorporates these features that are vital to proper and efficient industrial plant heating.

INVESTIGATE today GRID systems of high pressure unit heaters, blast coils, and radiation . . . the answer to maintenance-free heating in the industrial plants

D. J. MURRAY MANUFACTUR

whose men will make a wholesale trek to the tank plant.

Probably the most intelligent appraisal of Cadillac's effect on the labor market came from an official of the Chamber of Commerce. He sees Cadillac staffed from the 20,000 floaters or shifters-the people who jump from plant to plant and spend much of their time on unemployment rolls.

But despite a lack of worries now, some industries that are coming into the Cleveland area in the months ahead admit to labor qualms. Ford, for instance, is known to be concerned about where it can lay hands on 7,000 to 8,000 workers for its new engine plant and foundry. The Ford operation could start on a limited scale by the middle of next year.

· Source of Wonder-The thing that amazed many people about the Cadillac applicants was that the ratio of skilled to unskilled applicants was just about average. Many Cleveland industries have had trouble getting skilled help. But Cadillac could have started operations right away-on its roster of first-day applicants.

In only two classifications-engineering draftsmen and office personnelwas there any real shortage. The fact that the plant is several miles from the downtown area probably discouraged many office workers. Draftsmen have been at a premium in Cleveland plants for some time.

• Payroll Additions-Cadillac's first hirings were for skilled help to convert the bomber plant-electricians, pipe fitters, millwrights, maintenance men. Production workers, including machine operators, assemblers, crane operators, etc., will be put to work as soon as the machines are in.

II. Wichita

Korea's first impact on Wichita was \$250-million worth of Air Force work. It came on top of an already full-size business and manufacturing boom. But it looks like the city can handle it.

· Boeing Built-Most of the boom-onboom centers around Boeing Airplane Co., which builds the B-47 jet bomber. This week, Boeing said it will have to boost employment by about one-thirdfrom 10,875 to 15,000 workers. It already has made plans with the Interna-tional Assn. of Machinists for a 48-hour week, and perhaps a third 61-hour shift. Since August, Wichita's employment

has climbed steadily. Last month, employment shot up 1,400-from a level that had already topped the wartime peak. At Boeing and Beech Aircraft Corp. over 100 new workers are signing on every day.

Demand is heavy for skilled helpproduction planners, design engineers, inspectors, and layout men. As always, tool and die men are in the center of the scramble.

• Happy Move—Boeing's decision to push its force to 15,000 was a happy one for local businessmen. Last fall, the company had told local builders and merchants that they could anticipate a 15,000-employee force at Boeing by mid-1950. Last spring, Boeing had to renege. The company said then that probably the best it could do would be 10,000. That left builders who had planned housing for 15,000 on the spot.

The sour note of Wichita's boom, however, came from some of those same builders who had gone in for rental property. Six weeks after they had complained about being overbuilt, they announced rent increases. Besides bringing a slap from the state employment service, the move stirred up rumbles from the city's white collar help and other nonwar workers.

All in all, though, Wichita won't have the housing problem that plagued so many war production centers last time. Right now, there are 500 rental units available or nearing completion. Several thousand more are under construction, and about 2,500 of them are

to be done this year.

• Boeing Briefs Business—One device that has made things easier all around is the liaison between Boeing-Wichita and the city's business community. Boeing's general manager, J. E. Schaefer, keeps the community in touch with what is going on at the plant of its major employer. Recently, he warned that the B-47 is far from a finished airplane; that, as a result, there will be dislocation here and there to accommodate the thousands of change orders. And he added:

"Our people are your customers. Please keep this in mind and resist increases in costs at every turn if you want us to produce the needed weapons at prices that are reasonable."

• Something for Everybody—While Boeing and Beech expanded their work forces, the remainder of the business community isn't idle.

Wichita has 523 manufacturers, most of whom are fighting for subcontract work (which most of them will get as the plane program unfolds). Cessna Aircraft now looks as if it will be the major subcontractor in airframe parts. Beech probably will take on some work for Boeing, too, although Beech is expecting to receive large military contracts of its own.

Housing, of course, is booming. In addition, Kansas Gas & Electric Co. has announced a \$7-million expansion program. Derby Oil Co. is putting \$2-million into a new plant. The Gas Service Co. is expanding, and the Coleman Co., a large manufacturer of space heaters, is looking for war work.



Oxygen cuts electric furnace melting costs over \$2,000 per month



Clarence Nolan and W. R. Lysobey, Airco Technical Sales Representatives, were called in and suggested a series of test heats using Airco oxygen. On the basis of these tests, it was found that the cost of Airco 99.5% pure oxygen is about the same as the iron ore it replaced ... but, the savings in ferro manganese, heat time, electrodes and power were appreciable—amounting to more than \$1.00 per ton melted on a monthly tonnage of about 2,000 tons. Furthermore, the high

quality of the steel was maintained.

Additional savings were also enjoyed when the problem of handling and storing iron ore was eliminated.

The Wehr Steel Company was most pleased with these results and have adopted oxygen refining of acid electric steel as standard practice.

For technical assistance on this unique refining process or a copy of our folder "Oxygen In The Electric Furnace," please write to your nearest Airco office.



TECHNICAL SALES SERVICE - ANOTHER AIRCO PLUS-VALUE FOR CUSTOMERS

There's Nothing Like Good Plant Location

Within reason, new plant investment is wise if it will eliminate a recurring operating expense. It was on that basis that H. A. Roemer, Jr., president of the Sharon Steel Co., ordered a road and bridge investment aimed at saving a recurring \$15 fine.

Sharon Steel's plant is backed up to a small stream which is the Ohio-Pennsylvania border. It's no more than 200 ft. from the plant to the nearest Ohio road, where a 52,000-lb truck-trailer load is legal. But to reach it, Sharon truckers had to drive 2.5 mi. over Pennsylvania road. There, only a 40,000-lb. truck-trailer load is legal. One story is that truckers habitually delayed their departure until scouts reported the Pennsylvania road "all clear." Any time an overloaded truck was stopped, it meant a fine—usually \$15.

Sharon Steel placed flooring on a railroad bridge across the stream, built the 200 ft. of road. Now its trucks can reach Ohio-and the company's Detroit subsidiary-without difficulty and with full loads.



Orchids for a Baby

In Hawaii, orchids are just a mulch. Castle & Cooke uses rejects of the flower from a nearby grower to spread around and protect the roots of young macadamia trees. The macadamia tree produces a nut that is considered an exotic delicacy. Ordinarily, it sells for about \$1.10 a lb. in the U.S., largely because of its scarcity and the trouble it takes to process it. Castle & Cooke, which hopes to make the nuts commercially plentiful, has invested \$1-million in the past two years for clearing the jungle land and planting it to macadamia trees.



John Salarge just buys and buys, trusting his "instinct" Schion looks at his inventory records—they're never up to date anyhow. One of those days...ouch!







Horseon M. Suggry has thousands of inventory facts and figures on file regarding past usage. Too bad for his harssoon associates that he has no system for charting fature require ments...ne positive control of stock movement.



83

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Vatch out for these knaves—they can cost you plenty. But remember this: your only sure protection is a ystem that will keep your inventory in balance at all imes, maintaining just enough—but not too much—of each tem you need for production...or sale...or your own use. Setting up such a system is easy when you turn the problem over to Remington Rand. You benefit (1) from experience ained in developing inventory control systems for literally tens of thousands of companies; (2) unlimited choice of methods, or we make all types of machines and equipment; (3) correct nstallation of your system and instruction of your personnel. Here are just a few of the many methods we offer:

YNCHRO-MATIC gives you a "free ride" to efficient inventory control, is your clerk writes invoices, a synchronized mechanism autematically unches tabulating cards which, in turn, permit high speed, mechanical roduction of daily reports on disbursements and inventory position... aily summaries by item for perpetual inventory control...or detailed ales analysis in any desired breakdown!

(ARDEX VISIBLE SYSTEMS give you an ever-current picture of your nventory status through the use of colored Graph-A-Matic signals and The Chart That Thinks". These devices automatically translate the unantity of each item on hand into action required for successful control, with clerical savings as high as 50% compared with other systems. (New lobot-Kardex saves an additional 30% in posting time!)

PUNCHED-CARD TABULATING SYSTEMS— (you can rent or buy the quipment) are effective for chain store and wholesaling operations, with unit cards covering individual inventory items filed in convenient tub lesks. Reorder control cards provide automatic requisitions for purchasing of replacement stock as unit cards are pulled for the preparation of hipping orders, invoices, sales commission checks and profit statistics.

or further information - without obligation - mail the coupon today, or shone the nearest Remington Rand office.

Remington Rand



Remington Rand Inc., Management Controls Division, Room 2500

I would like to have information on inventory control systems for the

☐ Wholesale

Zone___

☐ Retail

State

315 Fourth Avenue, New York 10, N.Y.

☐ Manufacturing

type of business checked below.

Name_____
Company___

City_

CAMPBELL CHAIN A

High standards of quality are traditional with Campbell. To assure that all Campbell chain meets our standards—and yours—every link in every chain is rigidly inspected. When you need dependable chain, depend on Campbell.

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Joe Every Need: INDUSTRIAL, MARINE, AUTOMOTIVE, FARM, SPECIAL PURPOSES

RESEARCH



PRECISION TOOLS, such as this brailled wood-marking gauge, enable the sightless cabinetmaker to match the accuracy of any worker. Slider locks in place, pin marks wood.

Special Tools Help Blind Workers

Helping sightless work by touch is job of American Foundation for the Blind. It stresses safety and utility.

Helping the blind live conveniently without sight is the business of the Technical Research Section, American Foundation for the Blind. In its three years, this group has developed more than 70 items specifically for the blind or partly blind. Primarily, these are tools for both job and home and aids for everyday living, although some are amusements.

Devices include a collapsible cane, a

phonograph modified to play recordings of books, brailled watches, and even an automatic pancake turner. A nonprofit organization, the foundation sells them to the blind at cost. In designing such devices, every effort is made to have them resemble their conventional counterparts as closely as possible. That spares embarrassment and innumerable questions whenever the devices happen to be used publicly.



SELF MEDICATION is possible with special instruments. This one enables blind diabetic to administer proper dose.



OFFICE WORK is helped by such devices as this scale. It's calibrated in braille. Disc moves under load so the weight can be read.



DELICATE WORK, such as soldering radio connections, can be handled with this iron. It heats instantaneously, cools fast, allowing blind worker to locate next spot.



SAW HOLDER lets the blind craftsman work to precise measurements without difficulty. Hand saws and some hack saws fit this jig, which is a safety device, too.



OPENING CANS IS EASY and fast with this device, which is useful in the kitchen as well. It's designed to remove hazards.





with today's high speed cutting tools.

The bottleneck right now is getting work to and from cutting tools, and feeding cutting tools under precision control through the work.

Bellows Air Motors—the unique air cylinder with built-in electrically-controlled valve—crack that bottleneck wide open.

As the power source in Bellows "packaged" work and tool feeds, the Bellows Air Motor feeds parts quickly and accurately to cutting tools, and feeds the cutting tools through the work at exactly the right pressure and feeding rate . . often doubling, even tripling production.

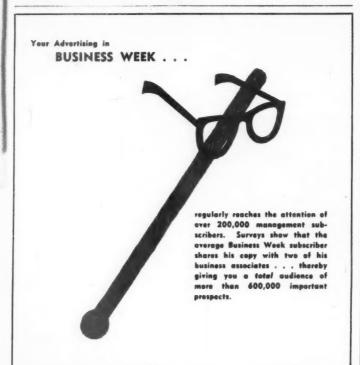
Used in thousands of plants, large and small, Bellows "Controlled-Air-Power" Devices are setting new records of high production and low cost from standard machine tools.

The Bellows Co.

AKRON 9, OHIO

Manufacturers of "Controlled-Air-Power" Devices: Air-powered Work and Tool Feeds, Air Cylinders, Air-operated Work Holding and Clamp-ing Devices.





COMMODITIES

Wool Prices Rise

And U.S. production is down, but demand is higher than ever, so don't expect to see any price cuts.

It's a safe bet that you'll be paying more for wool and wool products for a long time to come. That was pretty well confirmed at the Australian auctions last week when prices ran 40% to 50% above last year's closing levels.
You could see the effect of Korea and

possible government stockpiling in the rise. But actually, the factors behind high wool prices have been building up

since the war ended.

• Wartime Fears-During the war, the British and U.S. governments stockpiled wool-to make sure they would have enough in case shipments from Australia were cut off. When the war ended, the British government's U.K.-Dominion Wool Disposals, Ltd. (known as JO for Joint Organization) held about 3-billion lb., greasy basis, and the U.S. Commodity Credit Corp. held another 500-million lb. The wool trade viewed this stockpile as a dangerous glut that would depress the market for years. Estimates were that it would take 13 years to get rid of this

But it didn't work that way at all. A combination of factors combined to boost world demand for wool to the highest levels it has ever reached. Demand boosters came from style changes, Europe's filling in wartime clothing shortages, and worldwide population increases. Demand so far exceeded current production that the 13-year stockpile has been almost completely used

up filling the gap.

• Turning Point-That was the situation just before Korea. CCC stocks were completely exhausted; JO had only 150-million lb. left. It meant from here on wool consumption would have to be covered by current production.

Production is a problem. Before the war, U.S. apparel-wool production covconsumption. But U.S. demand has risen as much as anybody's since the war, and production, which had been falling off steadily for years, took a big dive. Labor costs in the sheep-raising business have jumped so much that most ranchers have found it more profitable to raise other animals.

In order to meet civilian demand alone, this country will have to import close to 75% of its needs. Estimates



New, 16-cylinder, 3300 hp Cooper-Bossomer supercharged gas-diesel engine in Arizona-Bidison's Yuma plant. Due to new, extremly compact "V" design and supercharging, ongine ranks as most powerful of its size and type ever built.

How a new 3-Way Diet cuts the feed bill for horsepower

IN power plants, fuel consumption is usually the largest cost item on the power budget. It runs into real money! Time and again, Cooper-Bessemer engine developments have brought this cost to a new low. And the latest Cooper-Bessemer development is one of the most significant of all!

Shown above is one of the new-type, supercharged Cooper-Bessemer engines recently installed in the Yuma plant of Arizona-Edison. Normally operated on the gas-diesel principle (developed by Cooper-Bessemer and now widely applied), these engines burn inexpensive natural gas with only a pilot charge of fuel oil. If the gas supply falls off, the engines simply burn correspondingly more oil.

But that's not all. If there's no risk of sudden gas curtailment, these engines are quickly, easily converted from gas-diesel to 100 per cent gas operation... supercharging and all! Thus there's complete 3-way fuel flexibility—oil, gas and oil, or gas alone. Fuel

costs can always be held to an absolute minimum.

Cooper-Bessemer developments are paying off for power users in all fields... stationary, marine, locomotive and other mobile services. If you have any interest in power, be sure to find out all about the new things being done by one of America's oldest engine builders.



New York • Chicago • Washington • San Francisco • Los Angelea • Houston • Dallas • Odessa • Souttle • Tulsa • St. Louis • Glouccata/ New Orleans • Shreveport

DIESELS - GAS ENGINES - GAS DIESELS - ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS - HIGH PRESSURE LIQUID PUMPS

steel strip from continuous coils . . .

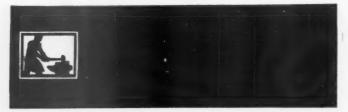
FOLLANSBEE COLD ROLLED STRIP feeds right from the coil into your automatics—a continuous supply of uniform strip steel for any kind of forming operation. Manufactured to your specifications Follansbee Cold Rolled Strip is available in tempers and finishes for most industrial applications.

time-saving supply system

FOLLANSBEE COLD ROLLED STRIP is production-line steel strip with machining characteristics suitable for freezers or furniture or fixtures. Regardless of the forming operation involved, the continuous feeding of Follansbee Cold Rolled Strip from coils saves time and labor and material.

that keeps automatics in action

FOLLANSBEE COLD ROLLED STRIP and Follansbee Polished Blue Strip are both furnished in continuous coils that keep automatics in action for real productioneering teamwork. To help you select coil diameters and weights, we'll send you without charge a Follansbee Coil Weight Calculator. Just write us on your business letterhead.



based on consumption during the first half of this year indicate that total wool needs for the year will run around 415-million lb., clean basis. About 300million lb. of that will be imported.

Now with mobilization likely sometime soon, the government is almost certain to begin stockpiling again. No definite plans have been made yet, but once they are, stockpile buying will be another factor to keep prices up.

• Uncertainty-You still can't be 100% sure of future price trends. Civilian demand may not hold up at present levels; buyer resistance has already set in to some extent in the apparel business. Men's suits in the middle-price bracket are showing up in wool-rayon mixtures, and in the low-priced brackets, all-synthetic clothes have been available for some time. The same thing is happening in the rug business (BW-Sep.2'50,p56). If this trend keeps up, it reight areas out II. S. degrade according to the control of the same out. it might even cut U.S. demand enough to bring prices down again.

But no downward adjustment of wool prices looks likely for a long time. Even with widespread new use of synthetics in place of wool, wool trade observers point out, total use of wool is increasing. And once the government gets into the market, it will mean even more

upward pressure on prices.

Waste Price Doubles For Paper Box Makers

The mad scramble of wastepaper dealers for kraft and corrugated box stock has doubled the price to mills in a single month. Waste that cost the mills \$15 a ton on July 1 was bringing \$30 a ton on Aug. 1.

The dealers in turn are faced with a similar boost. In Cleveland, they pay 50¢ for 100 lb. of general run waste. Three months ago, the price was 15¢. Reasons for the sudden rise:

• Department stores and retailers are stocking up on paper boxes, demanding delivery in September and early October to beat the Christmas rush. Formerly, they were satisfied with late October and November deliveries.

· Many paper mills let their raw material inventories run low last spring. Kraft and corrugated box waste are most cagerly sought. However, maga-

zine and book wastepaper demand generated a rise of about \$6 a ton in the past 45 days. Waste newsprint brought up the end of the procession.

Makers of other grades of paper are facing almost as big a buying rush as the box makers. Most mills have order backlogs so large that they will not book orders more than 60 days ahead. The Canadian rail strike, by reducing pulp shipments, had forced some mills to reduce operations.

Pepper Spree

Prices are at record levels now, but fall shipments will taper them off. Big question is Indonesian supply.

Fear that the short world pepper supply might become still shorter has sent pepper prices to their highest levels in history. From a low in mid-May of 85¢ a lb., pepper has jumped to \$2.00 a lb. for shipments due from overseas about now.

• Relief Coming—The trade thinks this price spree is only temporary. Once shipments begin to arrive this fall from India and Indonesia, it looks for prices to slide off. Though supplies in this country at present are equal to only six to eight weeks at normal consumption, at least 300 tons of pepper from India are on the way in now. And between 500 tons and 600 tons of India's last year's crop are due in September.

This is in-between seasons on pepper. New crop harvesting in Indonesia begins next month, and in India in December. Hence buying at the \$2.00 price has been cautious. Dealers are holding back as much as possible, looking for lower prices when the new ship-

ments arrive.

• Indonesia—The big question mark in pepper supplies and prices for the rest of the year is how much pepper will be available from Indonesia this season. Before the war, the Dutch East Indies accounted for 80% of the world's pepper supply. Most of the rest came from India. But Japanese destruction of pepper vines during the occupation and political disturbances in Indonesia since the war have kept Indonesian shipments to driblets. India, with government encouragement, has become the world's largest supplier.

• Hope for Best—This year, pepper importers are hopeful that Indonesian pepper will once more be available for the world market in substantial amounts. Best guess is that the 1950 world crop of pepper will amount to 15,500 tons, with Indonesia supplying 8,000 to 9,000 tons. So far, however, shipments from Indonesia have been

only about 2,000 tons.

Because the world pepper supply has been short since the end of the war, no surplus stocks have been built up in this country. Current imports have just about covered U.S. needs of around 1,000 tons a month. Therefore, any interruption in pepper shipments right now would mean a greater pepper shortage than we had in the last war, when the U.S. had very large stocks to draw from.

CRISIS in the AWFUSS*

4 MORE BILL-CLERKS! WHERE'LL YOU PUT 'EM?

IN SPACE SAVED BY NEW GLOBE-WERNICKE STREAMLINER DESKSI



* An AWFUSS is a place where business is misconducted



g, lifetime finish, ess traditional G/W

GLOBE-WERNICKE "STREAMLINER" DESKS

New, compact design - organized, efficient work centers for executives, salesmen, stenographers, calculator operators, and every type of desk user.

These handsome desks actually increase working ease and efficiency, but require LESS SPACE-considerably less.

Entire working surface is reachable-usable.

Other convenience features are available at slight extra cost, such as visible reference arm slides, and typewriter side shelf.

Efficiency features — corner legs or adjustable height pedestals, square or molded top edges.

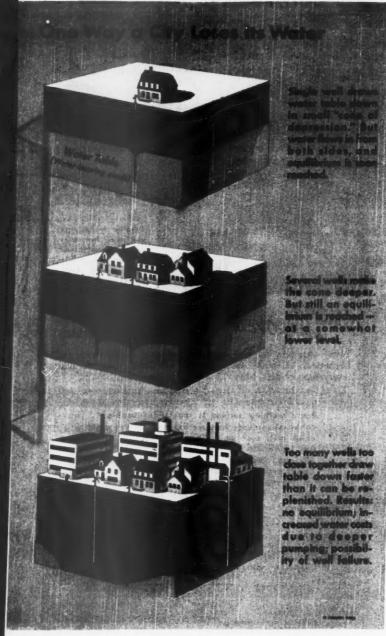
Buyers will consider new low prices an improvement.

See these NEW "Streamliner" Desks at Globe-Wernicke dealers, quickly found in your classified telephone book under "Office Furniture & Equipment."



RESOURCES

Plenty of Water-But Not to Waste



Industry must play big part in harnessing ample U.S. resources and husbanding sometimes-strained supplies.

There is plenty of water.

You may have read or heard that the nation's water resources are failing, that we're using our water supplies faster than they can be replaced. In the large, that just isn't true.

The United States has plenty of water reserves, both underground and on the surface-although they're by no means evenly distributed. And far and away, more water falls each year in the form of rain and snow than we can possibly use.

· Local Shortages-There are local shortages-lots of them. The number is, if anything, rising. But every one of them could have been prevented by foresight. And every one of them can be licked

by perseverance.

• It's Up to Business-It's the businessmen, primarily, who are going to have to provide that perseverance in places where water is short. Even more important, they are going to have to provide the foresight in places where it isn't short. Doing something about water costs money-and with taxes what they are, no community is going to spend that kind of money without being pushed.

Another incentive to act: Some of the things you can do to save water will also save you money on your water

• First to Be Hit-Why should you bother? Because water shortages have a way of creeping up on you. Toledo, for instance, has plenty of water, with Lake Erie right on its doorstep. Yet only a few weeks ago, Water Commissioner George Van Dorp warned that lake-water pollution has been rising steadily for six years. So it may be that a few years from now Toledo companies that need pure water-and that have always taken it for granted-will find themselves faced with a shortage.

And whenever a water shortage develops, it's industry that gets it in the neck first. When there isn't enough water to go around, the order of priority is: domestic and sanitary use first, agricultural use (if any) second, and industrial use last.

Look at New York City. Everybody



Before the board meets to discuss decentralization, you will need all of the facts that tell the complete story about the regions you are considering. Specialists in the Norfolk and Western Railway's Industrial and Agricultural Department can give you all of the facts about a territory you should consider—the great area served by this railroad.

They can tell you why progressive manufacturers are moving into this uncrowded industrial region.

They can show you the important strategic safety factor in this territory.

They can show you plant sites fitting your specific requirements.

For almost half a century, specialists in the N. & W.'s Industrial and Agricultural Department have assisted manufacturers in finding satisfactory plant locations. They are trained to know the manufacturers' problems of location, and they have a broad knowledge of this Land of Plenty. You will need the facts they possess in your pocket to back you up when you are ready to discuss new plant locations with the men who have the final say-so.

For up-to-the-minute information about any section of the Land of Plenty, write the Industrial and Agricultural Department, Drawer B-313, Norfolk and Western Railway, Roanoke, Virginia.

Norpolkan Western

* The Land of Plenty — the six great states served by the Norfolk and Western — Virginia, West Virginia, Ohio, North Carolina, Maryland and Kentucky.

LAND OF PLENTY



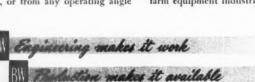
A BORG-WARNER ENGINEERING ACHIEVEMENT FEATURED ON SIX OUT OF TEN 1950 TRACTORS

Rain or shine...hot or cold... weather or not...farm tractors have work to do. But all too often, in the past, adverse weather caused carbureter trouble. So Borg-Warner's Marvel-Schebler Division designed a tractor carbureter that stays on the job in any weather. With a "back suction economizer" that automatically regulates the fuel-air ratio, it assures steady, economical fuel flow regardless of weather conditions.

What's more, it features a dual float for smooth performance on the level, or from any operating angle uphill, downhill or sidehill.
 Marvel-Schebler Tractor Carbureters are built for long-lasting service and economy.

No wonder six out of ten 1950 tractors are being equipped with Marvel-Schebler Carbureters...to give year 'round "weather-wise" performance.

One more example of how "B-W Engineering makes it work—B-W Production makes it available." Of how Borg-Warner serves you and America through the appliance, automotive, aviation, marine, and farm equipment industries.





Almast overy American bosofits every BORG-WARNER

THESE UNITS FORM BORG-WARNER, Executive Offices, Chicage: Borg a BECK BORG-WARNER INTERNATIONAL - BORG-WARNER SERVICE PARTS - CALUMET STEEL - DETROIT GEAR DETROIT VAROR STOVE - FRANKLIN STEEL - INDERSOLL STEEL - LONG MANUFACTURING LONG MANUFACTURING CO. LTD. - MARBON - MARVEL-SCHEBLER CARBURETER MECMANICS UNIVERSAL JOINT - MORSE CHAIN - MORSE CHAIN CD., LTD. - NORGE - NORGE-FER PESCO PRODUCTS - ROCKFORD CLUTCH - SPRING DIVISION - WARNER AUTOMOTIVE PARTS WARNER GEAR - WARNER GEAR CD., LTD.

knew 10 years ago that the reservoir system was fast becoming inadequate. But the city acted too slowly. Fortunately—due to a combination of public cooperation and favorable rainfall—the situation never got too serious. Yet even with the moderate shortages that did develop this year, such industrial uses of water as car laundries and air conditioning were cut by law. Had the shortage become worse, no one doubts that other industrial uses would have gone by the board.

• Foresight—Now look at Akron. It has never had a water shortage; today, it uses less than half of its available supply, on the average. The reasons foresight. No water shortage was imminent in Akron in 1922, or 1929, or the early depression years. But in 1922, Akron took steps to conserve the water supply of Lake Rockwell. In the later periods, it built two new reservoirs.

As a result, Akron had plenty of water, even in the drought periods of 1935-39 and 1943-44, when many parts of Ohio were thirsty. There's no doubt that the city's favorable water situation attracted many war contracts.

Biggest Users—The fastest-growing industries today—such as chemicals, plastics, synthetics—are among the biggest water users. But even many old-time industries use more water than any other single raw material (table, page 88).

The effort to do something about water can emphasize either conservation of existing supply or creation of new supplies

supplies.

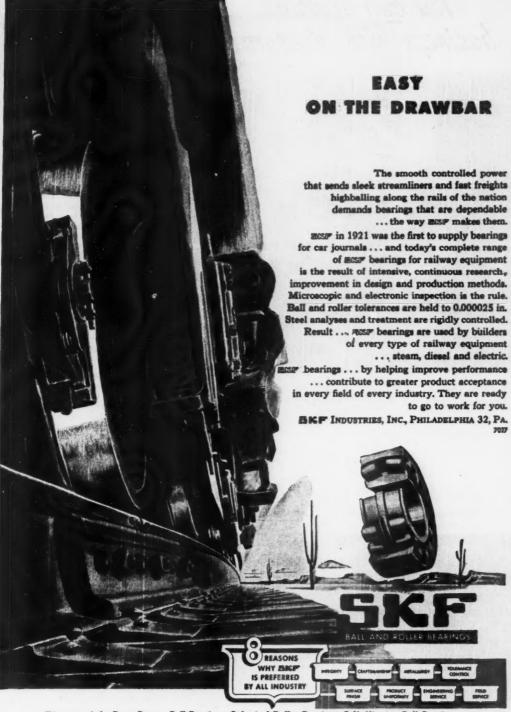
We are wasting our potential usable supply today in three chief ways—use, pollution, and erosion. In all three, we can save.

I. Waste in Actual Use

The first waste is in actual use-for drinking, for sanitation, for irrigation, and for industry. The best way for industry to save here-and it may save you considerable money-is to use the same water over and over again, instead of using it once and throwing it away. There are many ways to do this. If you use a lot of water for cooling, you may find that one process can use water that's a good bit warmer than you need somewhere else. In that case, you use the water first where it must be the coldest. Then use this warmed-up water again where you don't need it quite so cold. You may be able to do this three or four times.

 Cooling Towers—Or you can cool the water with cooling towers. This steps up tremendously the number of times you can use it. Celanese, at its Bishop (Tex.) plant, recirculates cooling water 50 times before discharging it because of low quality.

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Purifying it is often cheaper than using fresh water each time. Cooling water can be diverted into the process itself after it's too warm for further cooling service-or used as boiler-feed water, where its heat is an asset. The average gallon of water at Kaiser Steel Co., Fontana, Calif., is used 46 times before it gets out of the plant.

There's an added advantage to recirculating and reusing water: Intake mains and sewer lines can be smaller and thus less costly to maintain.

• Wide Open Valves-Elimination of outright waste is very important. The fetish of many department chiefs for wide-open valves is one example. In one plant, machine operators had always opened valves a certain number of turns, and they were convinced that was just right. Without telling them, the plant manager adjusted the line to cut the flow 25%. The operators continued to open the valves the set number of turns-and it worked just as well.

Among the many other in-plant ways of saving water: Make regular leak surveys of your water lines; insulate hotand cold-water pipes; install meters in water-using departments-your department heads can save plenty if they become water-conscious; put float valves in roof tanks to keep them from overflowing.

II. Useless Squandering

Such savings can all be made in actual useful consumption of water. But far and away more water is wasted each year through useless dissipation of water reserves by pollution and crosion. Emphasis on the health hazards involved in pollution have tended to obscure the fact that a huge amount of otherwise good water is rendered

Fortunately, many industrial areas have set up pollution-abatement bodies -sometimes local, sometimes interstate. • Ohio Basin-Perhaps the best known group is the eight-state Ohio River Valley Water Sanitation Commission. It was authorized by Congress in 1936 to enable Ohio River states to get together to 'do something about river pollution. But it didn't finally get under way until 1945, when the last of the affected states ratified the compact (BW-Aug.11'45,p46).

• Industrial Wastes-Although sewage is probably the most frequent offender in stream pollution, industrial wastes can be just as damaging. The Schuylkill River, which forms a major part of Philadelphia's water supply, is heavily polluted upstream by coal dust-so much so that usable fuel can be ob-• Too Hot-The Mahoning River at Youngstown, Ohio, offers a somewhat different sort of example-it's polluted



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Make a ton of viscose rayon	200,000

by heat. Industry in the area uses some 1.2-billion gal. of river water a day. But the flow of the river is only about 117-million gal. a day. That means that every gallon of river water is used more than 10 times. And the major use is for cooling. As a result, by the time the river passes Sharon Steel's mill at Lowellville, its temperature may be as high as 140F—in December.

Business Groups—Two organizations of businessmen—Mahoning Valley Industrial Council and Trumbull County Manufacturers Assn.—are trying to do something about the Mahoning. Between them, they include practically every major company in the valley.
 Ground Water—If pollution of surface water is bad, pollution of ground water is much worse. Ground water moves so slowly that once it is polluted it's almost impossible to get rid of the pollution. Sewage is rarely a problem here; industrial wastes are the major offenders.

In parts of Texas, crude oil is found floating on underground salt water. When the mixture is pumped to the surface, the brine is a waste product that must be disposed of. For years, it was simply allowed to run off on the ground, where much of it seeped into the soil. The shallow ground water reservoir soon became polluted with salt, and water from neighboring wells

became unfit for human consumption. Although new pollution has now been stopped, no way has been found as yet to get rid of the salt that's already present.

• Salt Seepage—At Baltimore, one of the first U.S. industrial centers, the level of water in the shallow underground reservoir was pulled below sea level years ago by consumption far higher than replenishment. Salt water from Chesapeake Bay and the Patapseo River seeped in and contaminated the remaining water.

But Baltimore had another card up its sleeve. Below the shallow reservoir was an impermeable layer of rock; below that was an artesian reservoir of fresh water. Wells were drilled through the polluted water-bearing stratum and the shale to the lower reservoir, and all seemed well.

• Copper Acids—It was, for many years. But trouble was building up. Copper smelters began dumping acid wastes on the ground; there seemed no harm in it, as the shallow reservoir was unusable anyhow. What they didn't foresee was that when the acid concentration in the shallow reservoir got high enough, the acid began to cat into the casings of the artesian wells. Eventually, it ate completely through some abandoned ones; water from the polluted upper reservoir flowed into them and down into the artesian level; and users of

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the artesian water began to get salt.

The solution now being used is to keep pumping all artesian wells, including the abandoned ones; as long as water is being pumped up, then the polluted water can't flow down. So far, it has worked fine.

III. Erosion Control

Surprising though it may seem, reforestation and other forms of soil conservation and erosion control are just as important in the water-supply picture as pollution control. Such control slows the flow of rain water to the sea —and that means more water where you want it when you need it. Here's how it works:

• 30 in. a Year—An average of about 30 in. of water a year falls on the United States in the form of rain or snow. Some of this evaporates at once. Some flows downhill on the surface, via streams and rivers, to the ocean. The rest is absorbed into the ground. Much of this ground water is used by grass, trees, and other vegetation, and is "transpired" into the air. Much flows downhill underground toward the sea, inst as surface water does.

Almost none flows in underground streams or rivers, however. Most of it filters through sands or porous rocks. Thus it moves very slowly; usually not more than a few feet a day. (That's why pollution in underground water is so hard to get rid of.) These water-bearing sands and rocks form the underground reservoirs which provide the principal source of water in so many parts of the country.

• Slowed by Trees—When rain falls on wooded land, its flow over the surface is slowed. As a result, much more of it is absorbed into the ground. What does run off does so more evenly. But when rain falls on bare ground, there's nothing to hold it back. So not much of it gets a chance to percolate into the ground; most of it runs off immediately to the nearest stream. The result is intermittent flash floods in rain periods, with comparatively low water in between.

• Tosoil—These flood waters also take topsoil along with them. That not only hurts the farmer; it also cuts the water supply-because that soil, sinking gradually to the bottom, decreases the carrying capacity of the rivers and the storage capacity of the reservoirs. For instance:

 Lake Dallas, the principal water source of Texas' second-largest city, once had a capacity of 63-billion gal. Today, it's down to 8-billion gal.—because of siltation.

 Peoria's underground reservoir is recharged by seepage from Peoria Lake, which is formed by a dam across the Illinois River. But years of siltation



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have deposited some 10 ft. of muck on the lake bottom, clogging the pores and impeding infiltration. Underground water levels at Peoria are dropping alarmingly.

IV. Development of Supplies

Another good way of avoiding water shortages is to augment the existing supply or to develop entirely new

• More Useful-The two main threats to existing ground water supply are pollution and depletion. Natural pollution is a phenomenon of the coastal areas: it occurs when the water level in the underground reservoir is drawn below sea level. Then, instead of fresh water running downhill underground to the sea, as is normal, sea water runs downhill into the fresh-water aquifer. • Long Island-There are many areas along both coasts where this has occurred. And the solutions have been almost as varied as the geography. Baltimore, for instance, merely tapped a deeper, artesian aquifer which the sea water couldn't reach. But Brooklyn, N. Y., didn't have any deeper water available.

Long Island as a whole has plenty of water. The soil is porous and there's ample rain. It's estimated that as much as 1-billion gal. a day flows into Long Island Sound or the ocean. Trouble is, consumption isn't evenly distributed. Very little of the available supply is used at the eastern end; in 1949, the underground level there was the highest in 10 years. But at the western end, pumping for both industrial and city use has always been heavy. Pavement and buildings cover much of the ground area and have limited recharge from rain. (This is a serious problem in all built-up areas

• State Stepped In—So by 1933, the underground water level got as much as 30 ft. below sea level. And salt water seepage was increasing. At that point, the state government stepped in. It passed a law requiring all users of 100,000 gal. per day or more in the affected area to get permits. All permit holders who don't spoil the water with impurities must return their used water to the ground through re-charge wells. In addition, new wells were drilled close to the shore, and fresh water was pumped down them. The idea was not to recharge the aquifer, but to erect a fresh-water barrier between the sea water and the low ground water in-land-sort of a hillock of water past which the sea water could not flow.

The problem isn't completely solved the Hotel St. George in downtown Brooklyn still fills its salt-water swimming pool from a well that used to give fresh water years ago. But at any

rate, things aren't getting any worse. · South Amboy-The coastal area of New Jersey near South Amboy has undergone heavy industrial development in the past 30 years. It had what seemed to be a plentiful supply of underground fresh water, and each new plant drilled wells to supply its needs. But after the National Lead Co. plant was set up in 1935, the water level began to drop at such an alarming rate that the state of New Jersey authorized an intensive study of the supply. It found that salt water was intruding around the mouth of the Raritan River and that destruction of the fresh-water supply was imminent unless pumping could be sharply reduced.

• Companies Unite—Faced with this

situation the three biggest companies in the area-du Pont, Hercules Powder, and National Lead-banded together in a joint organization called Duhernal. It bought up land along the South River near Spotswood, about 8 mi. south of the affected area, dug a new well field, and built pipelines to get the water to the companies' plants. To conserve water, both the new wells and all the three companies' old wells at the plant sites are operated under one general management-which goes so far as to adjust pumping at the plant-site wells to compensate for pumping by other users in the area over whom it has no control

Finally, Duhernal built a dam across the South River below Spotswood, creating a 178-acre reservoir known as Duhernal Lake. Its principal purpose is to help recharge the adjoining Duhernal well field by seepage from the lake bottom: it is estimated that recharge from this course comes to at least 5-million gal. daily.

Once the new well field went into operation in 1937, water levels in the plant-site wells rose sharply and have continued to rise.

• Texas Gulf-The Houston-Galveston area on the Texas Gulf coast has had a lot of trouble. Houston itself has suffered from a constantly declining ground-water level. Water consumption has more than tripled since 1935 while the level of the underground water has dropped as much as 150 ft.

Galveston has a declining water table too, but also-because it's so much closer to the ocean-considerable salt water pollution. And in Texas City, the declining level of the water table has led both to salt-water intrusion and to subsidence of the earth's surface-as much as 18 in. in a few places

· Sole Source-The basic trouble in this area is over-reliance on ground water; Houston has long been the largest city in the country to depend solely on ground water. Yet Houston is within 100 mi. of six of Texas' major rivers. Their combined runoff averages 25-bil-



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lion gal. a day, and their reliable flow is at least 4-billion gal. a day-a huge figure compared to the 250-million gal. a day now being used in the Houston-Gal veston-Texas City area.

So the problem there reduces to one of abundant supply, but inadequate development. The solution is to make use of the plentiful surface water. Steps are already being taken toward the solution:

• A few years ago, two Texas City industries—Pan American Refining Co. and Carbide & Carbon Chemicals Corp.-set up a subsidiary, Galveston County Water Co. It built a 28-mi, canal to the Brazos River, capable of carrying 275-million gal. a day. It also built a reservoir with a capacity of 21-billion gal. Today, this system supplies the two companies' own needs and is also used by other local industries and by the city. As a result, the city's wells are now used mainly for residential purposes; the decline in the water table has stoppedand there's enough leftover water to supply considerable new development.

· Houston also acted several years ago-it built a canal to the San Jacinto River and brought in raw river water for industrial use. Now it is going even further; two weeks ago, the city's voters approved a \$24-million bond issue to finance a dam and reservoir on the San Jacinto, a filtration plant, and an improved canal. This project has been in the talking stage since 1938; one of its strongest backers from the start has been the Houston Chamber of Commerce.

• Los Angeles-Southern California was one of the first and worst sufferers from declining ground water. Way back in 1904, when the population of Los Angeles was some 200,000, the city proposed a 233-mi. aqueduct to bring enough water from the Colorado River to supply a city of two million. There was a lot of opposition to what must have seemed then a far-fetched idea. But the city engineer in charge of the project is said to have stated: "If you don't build the aqueduct, Los Angeles will never need it," and the project carried.

Los Angeles has built more aqueducts, but still hasn't enough. It uses ground water at twice the natural-recharge rate. Salt pollution has occurred at wells even two miles inland.

Obviously, the Houston solution just doesn't apply to Los Angeles. There isn't any excess surface water to tap. In fact, Southern California is worried that upstream states may take part of the Colorado River water it gets now.

So far, there is no over-all city or state program, aside from the effort to keep all the Colorado River's water the area is now getting, and to get more if possible. But many individual companies have taken action.

· General Petroleum Corp. is one. First, it set up cooling towers, to permit



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Sixteen years ago, Ford Truck user Jim Owen of Branson, Mo., got the idea of promoting float-fishing to give city folks the most fishing pleasure with the least effort. Today, his fleet consists of 40 boats and 4 Ford Trucks.

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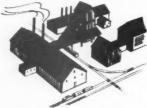
to start a float-fishing trip, Ford F-5 takes boats and provisions to up-river launching site. Powered by a 100-h.p. V-8 engine, the F-5 negotiates muddy river banks with ease. 95-h.p. Six also available, G.V.W. rating on 7.50-20 duals is 14,000 lbs F-5 models include: 9-ft. and 12-ft. Stakes and Platforms; 134-in., 158-in. and 176-in. w.b. Chass with Cab, with Windshield or with Cowl.

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recirculation of cooling water. These are cooled not only by natural evaporation, which is inherently wasteful of water, but by forced-draft cold air. In addition, instead of water, General uses the cold crude oil as it comes into the

refinery as a cooling agent.

• Lucky Lager Brewing Co., at Azusa, gets extra mileage out of its waste water. It has set up a complete sewage-treatment system-fine screening, sludge digestion, sludge drying-the works. After treatment, the water is turned into large shallow "spreading beds," where it percolates gradually back into the soil, thus recharging the aquifer artificially. Reason for all the complex purification is to be sure not to pollute the aquifer. And the reason for putting it back into the ground instead of using it direct is that the percolation through sand and gravel makes

it purer than any treatment plant can. (It has been suggested that Los Angeles adopt this plan with its municipal sewage, but it hasn't yet.)

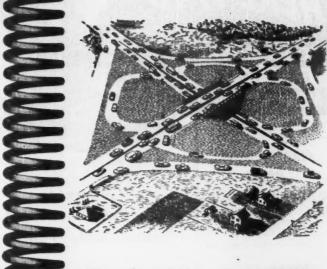
V. Gradual Depletion

Declining ground-water levels can be serious even when they don't let salt in. This gradual depletion has been a serious problem in many inland areas. Again, the solutions have been varied. · Louisville Survey-Louisville, Ky., had a big industrial growth during the war. Several synthetic-rubber plants were built there; the distillers, converted to production of industrial alcohol, were running around the clock. By 1943, users were pumping 75-million gal. a day, compared with about 37 million prewar. The water table was dropping so fast that the yield of some wells was down to only a quarter of normal. Some thought the supply near the rubber plants would be used up in two years.

So Louisville called in the U.S. Geological Survey to map the aquifer, study its permeability and rate of recharge, and make recommendations. The first thing USGS found was that the natural rate of recharge was only 40-million gal. a day. So, while they waited for a final report, the industries installed recirculation systems and cooling towers and, where possible, brought in raw Ohio River water.

The final report, when it came through, showed that all this would have been totally unnecessary if only USGS had been called in in advance. The sands near the river are very permeable; if the new wells had been located along the river in the first place, recharge by infiltration from the river bed would have been more than ample. As it was, the companies had to relocate their wells there-at an added cost of about \$5-million.

• Plan in Advance-It would seem that any area that wants new industry-and



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which depends on ground water—ought to have a survey made of its underground water. In most parts of the country, such a survey can be made by local engineers along with USGS.

• Lakes and Rivers—Another possible solution to the problem of a declining water table is to use river or lake water. That's what Carbide & Carbon and Pan American Petroleum did at Texas City. At Bishop, Tex., in 1947, Celanese spent \$1-million to build a 26-mi. pipeline to the Nucces River, and a reservoir near the plant to hold the excess supply. To get water for its Whiting (Ind.) plant during the war, Carbide & Carbon ran a pipe 700 ft. out into Lake Michigan and put in an automatic pumping station.

Sea water also can be used—for cooling—if special care is taken to avoid corrosion. Or sewage can be purified and used: Kaiser and others are doing it in California; at Sparrows Point, Bethlehem Steel now uses about 40-million gal. a day of Baltimore sewage to ease the drain on its wells.

VI. Artificial Recharge

But perhaps the most widely applicable way to check a declining water table is through artificial recharge. This can be done either by industry itself or by local or state governments.

When Peoria's water table began to drop, due chiefly to silt clogging the pores at the bottom of Peoria Lake, the Illinois state government got busy. It built special gravel pits along the Illinois River, and led the river water into them. From there, the water percolates down into the aquifer; thus the artificial beds do the job that Peoria Lake isn't able to do any longer. So far, the project is semi-experimental; the Peoria Assn. of Commerce, with the backing of all major local industries, is bearing much of the cost.

At Canton, Ohio, the near-surface aquifer is very shallow. Under that is a layer of impermeable clay. And under that is another gravel layer, quite deep. The shallow aquifer is recharged from the bed of the river, but it doesn't hold enough to give sustained year-round supply. And the deep one doesn't recharge fast enough.

• Wells in River—So the city dug two wells, right in the river, down to the deep stratum. One well has horizontal "fingers" reaching out from the bottom to collect water from the deep sands which is pumped up for city use. The other has fingers reaching out near the top, into the surface layer just below the bed of the river. The water that these fingers collect is pumped down into the lower sands, to provide a continuous artificial recharge. And Canton today has no water problems.

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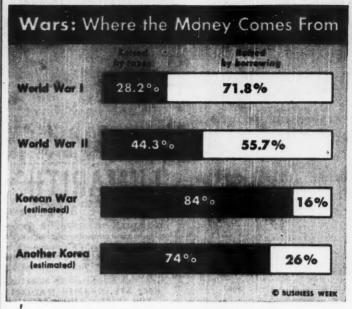
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FINANCE



Paying More As We Go

That's what Snyder hopes. There are limits to how high taxes can go, but the plan is to hold borrowing to a minimum. The 1950-51 budget will probably balance.

Rearmament is going to force the Treasury back to borrowing in a big

The red ink won't begin to flow copiously before the end of 1951. Until then, the stopgap tax bill should bring in enough revenue to pay for most of the extra procurement. But once the defense program hits high gear, pay-asyou-go will be out. Deficits may mount to \$10- or \$15-billion a year.

That's not much compared with the \$60-billion deficits run up during the last war. Nevertheless, such large-scale borrowing is sure to complicate life for the Treasury and for businessmen,

· Taxes' Share-Inflationary consequences of the new borrowing, however, will be mild, compared to what they would be for all-out war. In that event, the Treasury would do well indeed if taxes raised even half the cost of total mobilization:

• In World War I, when income taxes were still fairly new, taxes paid for little more than 28% of federal expenditures. Liberty Bonds provided most of the rest.

• During World War II, more than 44% of the government's expenses came from taxes.

• This time, there'll be an all-out effort to pay as much as possible. For a starter, Treasury will get by this fiscal year with no new borrowing.

· Balanced Budget-Before Korea, experts were predicting that the government would have to raise a mere \$500million to pay the fiscal 1951 bill. Now, current good business should wipe even this out. Of course, both spending and income will be much higher. But tanks and planes take a long time to deliver in quantity; the most you can expect to see actually paid for extra arms by next June is around \$2.5billion. The stopgap tax bill will yield that much, keeping the Treasury in the black.

• Then We Get the Bill-By next summer, defense spending will have hit a rate of \$35-billion a year. Nondefense spending won't be cut much. It will stay around \$25- to \$27.5-billion a year, for a total budget of more than \$60billion.

Taxes now are vielding more than

\$37-billion. The stopgap bill will raise the full-year take above \$42-billion. Next year's bill will be even tougher. By then, you'll have an excess-profits tax (good for maybe \$4-billion); still higher personal and corporate rates (good for maybe \$5-billion); and possibly more excises. Total tax: At least \$50-billion.

• How Heavily Can You Tax?—There certainly will be demands for still higher taxes. But experts at the Treasury and the Council of Economic Advisers fear an overdose would kill incentives, lead to waste and inefficiency. So the Administration won't want to squeeze the goose too hard. The top you can see now is a tax take of \$55-billion.

Because there are limits on taxability, it looks now as if the Treasury probably will have to borrow \$10-bil-

lion in fiscal 1952

 What Kind?—Secretary Snyder wants to get as much money as he can from nonbank investors—from individuals through E-bonds, from institutions

through F's and G's.

(Reason: Selling a bond to a bank merely multiplies the amount of money around. Banks hold governments only as a substitute for more profitable commercial loans. When a chance to extend credit appears, banks sell these bonds in the market or to the federal reserve. FRB is always ready to buy U.S. securities at par, "to keep the market stable.")

• Customer Shortage-Keeping governments out of bank hands, however, won't be easy-there may not be many

other customers.

For one thing, War II's E-bonds start maturing in large amounts in 1952. The Treasury will have its hands full just getting people to re-invest, let alone

buy more. The depa

The department is betting on a new scheme for E-bond refunding: an offer to extend maturing bonds indefinitely at 1% interest for every additional four months held. This is slightly higher than the 2.9% per year a bond owner now gets for holding on for 10 years. And it has the added charm of saving both investors and the Treasury an enormous amount of red-tape.

Selling new E-bonds won't be this easy. Right now, the Treasury can barely keep sales abreast of premature redemptions. Even the most inspired campaign probably couldn't sell \$2-billion worth—Korea, or no Korea.

Snyder's luck with F's and G's should be a little better. Institutional investors and trust funds always have liked them because they combine safety with a fair yield. And now, union pension funds are big customers. But these sources could only take \$2-billion or \$3-billion a year.

• The Banks-For the rest of the \$10billion it'll need in fiscal 1952, the



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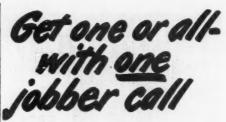
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Treasury would have to turn to the banks. Here, too, the path is thorny. Treasury can't depend on 90-day bills for any war financing. Already, it has about as many of these out as it cares to have at any one time. Thus any new cash probably would come from sale of the relatively cheap (in terms of interest rate) 12- to 15-month maturities.

• Who Wants Them?—Trouble is, though, that at the Treasury's price, they are too cheap. So banks are unlikely to buy them alone, unless the interest rate is raised. But that would raise the cost of carrying the debt. Secretary Snyder is notoriously unwill-

ing to do that.

Regardless of rate policy, FRB will see to it that the money market produces whatever cash the Treasury needs. Only question: Will inflation control take precedence over low debt costs? Federal Reserve says it will. Treasury officials are beginning to think FRB won't back down.

Bomb-Proof Banks

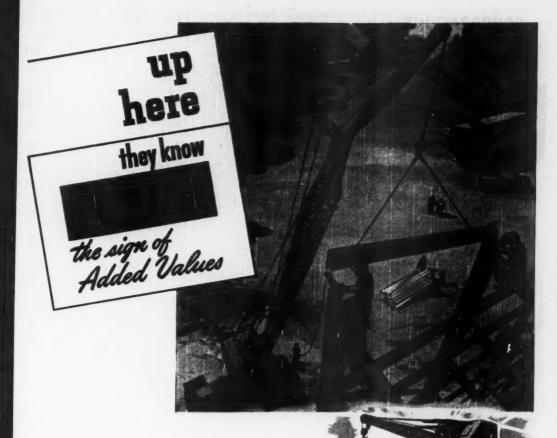
New York banks prepare for worst by microfilming records, storing films out of town. Deposit boxes are safe.

New York banks will be ready to take to the hills if the city should be bombed. The bankers aren't especially worried, but their depositors seem to be. Banks have been flooded with queries from depositors, who want to know if their money and valuables will be safe from atomic attack.

e Microfilm Records—A committee appointed by the New York Clearing House—of which all the larger city banks are members—is planning to microfilm essential bank records and store them somewhere well away from town. The banks themselves may set up main annexes at a single storage center so they can carry on operations even if New York were knocked out. They would clear balances with each other through an annex of the Clearing House.

However, several banks have already started putting essential records in separate out-of-town locations. For instance, one big New York bank has been storing microfilmed records in a Syracuse, N. Y., bank. And it's supposed to have sent another set of prints to the Midwest.

One of the committee's problems is to decide which records are essential and should be duplicated. You can compress an awful lot of data onto microfilm; 100 lb. of paper records can be transferred into a roll small enough



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to fit a coat pocket. But it's an expensive job. So there will have to be some selection.

All contracts, such as loan agreements, notes, etc., will be duplicated. So will some of the most vital bank records—running records that are constantly changing or accumulating notations. These will require special handling.

Running Records—On depositors' accounts, banks will film each monthly statement before mailing. A journal of debits and credits is kept for every 500 or 600 depositors. This will be filmed daily. The two sets will make it possible to reconstruct any account.

On trust funds, banks will microfilm a list of the securities in each portfolio. Films of the trust-fund securities journal will be sent out of town daily.

When the bank acts as transfer agent for a corporation, it will duplicate the last list of stockholders eligible for dividends. Then it will microfilm the daily transfer sheets. That will permit the bank to reconstruct a list of stockholders and their holdings for any given day.

• Boxes Safe—Though records used in offices may be vulnerable, New York bankers are confident that their underground vaults would protect safe-deposit boxes even if Manhattan were blown into a pile of brick. They point out that a bank vault built above ground at Hiroshima by the Mosler Safe Co. was only a few hundred yards from the center of the atom blast. The bank was almost completely destroyed. But the vault door still worked and the interior was untouched. Mosler checked this with tests at Bikini in 1946.

The Hiroshima vault was fairly small. Some of the New York vaults are six or seven times stronger, besides being below ground. Many were hacked out of Manhattan granite. The Chase National Bank's vault, for instance, has steel-reinforced concrete walls 12-ft. thick and three steel doors. Two of the doors weigh 45 tons; one weighs 34 tons.

Even vaults as strong as these could be blocked off temporarily by radioactivity, rubble, and broken water mains. But the bankers are sure that their customers' safe-deposit boxes will come through anything—contents undamaged—although the box owners might have to wait awhile.

Commercial banks aren't the only ones who are taking records out of town. In Philadelphia, Fidelity Bond & Mortgage Co. has been making duplicate mortgage records and sending them to the Pocono Mountains. And New York brokerage houses have been taking duplicate records beyond bombing range.

FINANCE BRIEFS

The busiest August since 1935 marked New York Stock Exchange operations last month. For the first eight months of 1950, sales totaled 335-million shares, the biggest eight-month total since 1933.

Trunkline Gas sold \$61-million in 20year first-mortgage bonds at 3.25% interest to life insurance companies. The company also sold privately \$6.5-million of preferred stock and \$14-million worth of common. Panhandle Eastern Pipe Line Co. bought 60% of these issues.

Sales jumped 50% at Lockheed Aircraft Corp. in the first half of 1950 over the first six months of 1949. Profits were up 114%.

The New Haven R.R. isn't doing away with all passenger conveniences (BW-Sep.2'50,p64). The road is putting accident-insurance vending machines into its major stations. It's supposed to be the first railroad ever to use machine-dispensed policies.

Householders pay an average of 7% less for electricity than they did in 1940, according to the Federal Power Commission. Meanwhile, the cost of living has gone up 70%.

Du Pont will pay a third quarterly dividend of \$1.50. Previous payments this year were 75¢ and 85¢. The company will earn 83¢ in the third quarter on General Motors dividends alone, mostly as a result of the extra payment.

All hotel operators aren't feeling the industry's decline in earnings (BW-Jul.8'50,p78). Hilton Hotels Corp. earned \$1.33 per common share for the first six months of 1950, compared with \$1.16 in the 1949 period.

Brooklyn Trust Co. plans to merge with Manufacturers Trust Co., if directors and stockholders of both banks approve. This would be biggest in the wave of postwar New York City bank mergers (BW-Aug.26'50,p65).

American Car & Foundry's backlog of orders has climbed from \$42-million to \$134-million since Apr. 30.

Thirty-nine life insurance companies are suing Colorado insurance commissioner Luke Kavanaugh over premium taxes. Kavanaugh says that when dividends are used as premiums for additional insurance, the 2% state premium tax applies.

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No More Planes

Curtiss-Wright to close its plant at Columbus; will concentrate on making engines and propellers.

Curtiss-Wright Corp. is officially out of the business of building airplanes. Last week, C-W announced it would close its big airplane plant at Columbus, Ohio, by March, 1951.

Still a Factor—C-W will continue to

• Still a Factor—C-W will continue to be a factor in the aircraft business, but will concentrate on making engines and propellers. Operations at the engine division at Wood Ridge, N. J., account for about 65% of all C-W sales. The propeller plant at Caldwell, N. J., last year made about half of all U.S. propellers. At present, Caldwell accounts for 30% of C-W sales. In March, C-W had a combined backlog of \$132-million.

C-W will be in a powerful capital position. At the start of 1950, the company had \$63-million dollars in cash and securities. Despite stockholder pressure, management has resisted efforts to split this up in dividends.

to split this up in dividends.

• Doubters—Not everyone believes that C-W really means to close its Columbus plant. In the heat of contract negotiations at Columbus, Local 927 of the United Automobile Workers charged that the company was merely bluffing. Since then, the union has signed a contract running till June, two months after the announced closing date.

Of course, the government could work out some arrangement for C-W to make planes at Columbus for other manufacturers. However, several other plane manufacturers are dickering to get the Columbus plant for their own use.

• Lease Expired—C-W's lease on the government-owned Columbus plant ran out on Sept 1. The company will continue to use the plant till it finishes some small government contracts. The plant has been employing 1,800 workers, a big drop from the 24,000 wartime peak. Actually, C-W hasn't built any complete planes for two years (BW—Nov.6'48,p40).

• Dividends—The company hasn't paid as much of its wartime profits to stock-holders as many of them would like. In 1946, for instance, C-W earned 2¢ per common share, paid out 50¢ per share in dividends on about 7.4-million shares. At the end of the year, it still had about \$112-million in cash, government securities, and tax refunds.

Late in 1948, the stockholders revolted. They threw out president Guy C. Vaughan, replaced him with a new team headed by Paul Shields, of the

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investment banking house of Shields & Co. (BW-Apr.16'49,p96).

The Shields regime hasn't been any

The Shields regime hasn't been any too free with dividends. It cut the rate to \$1 per share in 1949 from \$2 the year before. But it did placate stockholders by retiring about 447,000 shares of common stock at an average price of about \$9.50 a share. That was above current market price and close to the high for the year.

FRB Buys and Sells To Control Interest

Like Lewis Carroll's White Knight, the Federal Reserve Board is dyeing its whiskers green in the money markets these days—and sporting the largest fan in town to hide them.

FRB is buying unattractive securities, in effect, at a premium. At the same time, it's selling attractive issues at a higher discount. It's doing both in unprecedented amounts. Its object: to raise short-term interest rates without jeopardizing an impending low-interest retunding by the Treasury.

During the two weeks ended Aug. 30, FRB bought, on balance, about \$3.7-billion of short-term bonds and certificates. It sold, on balance, about \$3.5-billion of bills, notes, and long-

term bonds.

FRB got into this fiscal never-never land because of its anti-inflationary insistence on tighter money (BW-Aug. 26'50,p25). This policy was announced formally at the same time Treasury announced a refunding of \$13.6-billion of bonds and certificates maturing Sept. 15 and Oct. 1. Treasury will exchange for these maturing issues an issue of 13-month, 1.25% notes. Such a swap usually wouldn't go smoothly, though, with FRB selling other short-term issues at a discount to up interest rates.

However, FRB must support the Treasury in its refunding operation, despite any conflict in policy. Thus FRB is buying the unpopular maturing issues—will probably have most of them by the time they mature. That gets Treasury off the hook—by erasing the prospect that Treasury might have to pay off the maturities in cash. FRB will accept the exchange.

If the process stopped there, though, FRB would defeat its anti-inflationary policy. In buying federal securities, FRB increases the reserves against which its member banks may make loans. That's inflationary, for banks may lend about five times their reserves. (So, to counterbalance this, FRB is selling governments—about as many as it's buying.)

It may take some losses on these sales. But since most of FRB's profits go to the Treasury, the Treasury will

foot most of them.





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CONTEMPORARY of contemplative Cal, Alex Harper succeeded to the presidency of the Brass mills in 1924, shortly after they became known by their present name, The Bristol Brass Corporation. Soon he pruned production back to the fundamentals of Brass sheet, rod, and wire.

That year, business basked in the ominously bright weather that brews hurricanes. Bids roared and soared on the stock exchange. Everything was on the up-and-up. But Alex Harper was unimpressed. His practiced weather-eye saw danger signals. And he kept working doggedly to reduce the mill's debts, to calin down expansionist dreams, and keep the financial house in order. So when 1930 struck in all its fury, Bristol Brass was sailing with a well-trimmed ship that weathered the heavy seas and came safely through with few layoffs, even on 31 hours a week.

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Brassmen were working when others were not. And Bristol management has always charged itself with the responsibility to be ready for come-what-may. This philosophy has bred several generations of businessmen who are direct and practical in all dealings. No, you won't find an ounce of shirt-stuffing behind any desk at Bristol. What you will find is a team of experienced Brassmen who know how to handle your business the quickest, easiest, and most satisfactory way.

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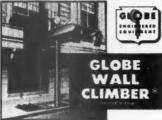




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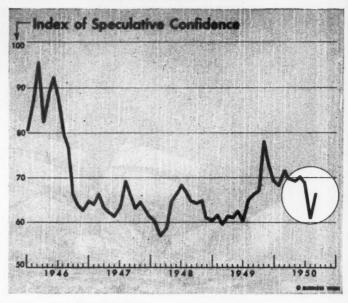




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THE MARKETS



They Still Don't Trust It

Stock prices are back up almost to where they were before Korea. But speculative confidence hasn't got anything like as high. It's an edgy market that almost anything can frighten.

If you study the over-all stock averages, it looks as if we still have a bull market in spite of Korea. Standard & Poor's composite index of 416 stocks, for instance, is now only about 1% below where it was just before the Korean break.

It's not the same bull market, of course. Some stock groups that were in the limelight before June 23 are lagging now (BW-Aug.26'50,p24). And some groups that had been wall-flowers in the pre-Korea bull market are now very much the life of the party (page 111). But by any definition, the bull market is going strong—though it's mainly a war boom now.

• Combined Index—Look at the market another way, though, and you can see that a lot of speculative steam has been taken out of the push for higher stock prices. If you divide an index of stock prices by an index of business activity, you can get a rough idea of what speculators think will happen next in the stock market. The result might be called an index of speculative confidence. The chart (above) is based on the S&P 90-stock index and the BUSINESS WEEK Index of Business Activity.

It shows that speculative confidence has a way to go yet before it reaches its pre-Korea level. In other words, traders aren't so sure as they were before Korea that stock prices will go higher over the long run.

This kind of index is by no means infallible. But it can act as a guide and sometimes tip you off in advance on a major shift in the stock market. The index showed as early as March, 1946, that speculative confidence was weakening. And from June, 1946, on, it kept pointing to a break. The 1946 bull market didn't collapse until September.

In May, 1949, just before the new bull market got started, the index of speculative confidence turned up while the S&P 90-stock average continued to go down. It did drop a little in June, before the turn came in the market but not nearly so much as the 90-stock average did.

• Fluke—The sharp peak in the speculative index during late 1949 is mostly a statistical quirk. The coal and steel strikes lowered BUSINESS WEEK'S business-activity index to an artificially low point. That, of course, created a terrific—and misleading—boost in the specu-

lative index. It dropped just as fast when the strikes were settled.

· Signal?-Then in March and April of this year, the speculative index started to drop while stock prices were still going up. That could have been a tipoff that the market was due for some kind of spill, although no one foresaw Korea then.

There isn't any signal so clear as that now. The speculative index and the stock index are both going the same way. But the speculative index is lagging behind. That might be a danger sign, because today's market is dominated by traders looking for quick gains. Such buyers are apt to get out

quickly as soon as the news is dis-

appointing.

• Wheeling Jam-Last week, for instance, Wheeling Steel announced its regular quarterly dividend, instead of the increase that many traders had expected. When the news came out, so many "sell" orders reached the New York Stock Exchange at the same time that trading in the stock had to be suspended temporarily. Wheeling common closed at \$32.63, off \$2.75 for the day. And yet Wheeling's 1950 earnings are estimated from \$9 to \$12.

That gives you a rough idea of what may happen to stock prices if Wall Street hears some really bad news.

The "Korean Market": Some Sample Issues

Industrial Common Stocks		Pre-			Recent Level vi			
American Can	Industrial Common Stocks			14 DA S.O. W.				
American Can	Dow-Iones Average	228 38	** 224 35	197 46	218.42	+10.6%	- 2.6%	
American Smelting & Refining				\$207.00	\$233.00			
American Tobacco			114.75	**90.12	94.75	+ 5.1		
American Woolen	American Smelting & Refining	*61.12	54.50	**50.00	59.00	+18.0	+ 8.3	
Anaconda Copper. *45. 37 32 12 28. 50 34. 50 +21. 1 + 7. 4 Bethlehem Steel. *43. 00 38. 00 33. 00 42. 00 +27. 3 +10. 5 Chrysler Corp. 81 00 80. 00 *62. 50 72. 00 +15. 2 -10. 0 E. I. du Pont de Nemoura 85. 37 80. 00 65. 50 77. 75 +18. 7 - 2. 8 General Electric 50. 50 49. 12 41. 25 48. 00 +16. 4 - 2. 3 General Poods. 51 75 50. 37 **24. 12 46. 00 +4. 2 - 8. 7 General Motors 99. 12 47. 25 76. 50 90. 12 +17. 8 - 7. 3 Gimbel Brothers *18. 62 18. 00 14. 12 18. 00 +27. 5 B. F. Goodrich. *110. 50 98. 75 83. 00 109. 75 +32. 2 +11. 1 Gull Oil. **73. 75 72. 00 62. 50 73. 62 +17. 8 + 2. 3 International Harvester. **31. 37 28. 37 25. 12. 30. 25 +20. 4 + 6. 6 Johns-Manville. 51. 50 49. 00 **20. 50 41. 00 +12. 3 -16. 3 Radio Corp. 23. 25 22. 00 14. 62. 18. 12 +23. 9 -12. 6 Sears, Roebuck & Co. 48. 50 47. 87 **40. 00 45. 12 +12. 8 - 5. 7 E. R. Squibb. 40. 00 36. 75 **29. 50. 31. 25 +16. 7 + 3. 8 Swift & Co. **39. 00 37. 00 **33. 50 38. 50 +14. 9 + 4. 1 United States Rubber. *47. 50 44. 00 38. 37 46. 37 +15. 4 + 1. United States Rubber. *47. 50 44. 00 38. 37 46. 37 +15. 4 + 5. 4 United States Steel. *39. 00 30. 00 **29. 12 31. 62 + 75. 9 - 19. 0 Utility Common Stocks Dow-Jones Average. *42. 50 78. 25 **50. 25 64. 50 +22. 4 + 6. 5 Detroit Edison. *35. 70. 25. 50. 31. 50. 43. 50. 43. 40. 7 + 13. 8 Pacific Gas & Electric 3. 50. 00 35. 70. **27. 50. 12. 57. 50. 40. 7 + 13. 8 Pacific Gas & Electric 3. 50. 00 35. 70. **27. 50. 40. 7 + 13. 8 Pacific Gas & Electric 3. 50. 00 35. 70. **27. 50. 50. 50. 31. 50. + 3. 40. 40. 40. 40. 40. 40. 40. 40. 40. 40	American Tobacco	76.50	68.25	**62.75	63.50	+ 1.2	- 7.0	
Anaconda Copper. *45. 37 32 12 28. 50 34. 50 +21. 1 + 7. 4 Bethlehem Steel. *43. 00 38. 00 33. 00 42. 00 +27. 3 +10. 5 Chrysler Corp. 81 00 80. 00 *62. 50 72. 00 +15. 2 -10. 0 E. I. du Pont de Nemoura 85. 37 80. 00 65. 50 77. 75 +18. 7 - 2. 8 General Electric 50. 50 49. 12 41. 25 48. 00 +16. 4 - 2. 3 General Poods. 51 75 50. 37 **24. 12 46. 00 +4. 2 - 8. 7 General Motors 99. 12 47. 25 76. 50 90. 12 +17. 8 - 7. 3 Gimbel Brothers *18. 62 18. 00 14. 12 18. 00 +27. 5 B. F. Goodrich. *110. 50 98. 75 83. 00 109. 75 +32. 2 +11. 1 Gull Oil. **73. 75 72. 00 62. 50 73. 62 +17. 8 + 2. 3 International Harvester. **31. 37 28. 37 25. 12. 30. 25 +20. 4 + 6. 6 Johns-Manville. 51. 50 49. 00 **20. 50 41. 00 +12. 3 -16. 3 Radio Corp. 23. 25 22. 00 14. 62. 18. 12 +23. 9 -12. 6 Sears, Roebuck & Co. 48. 50 47. 87 **40. 00 45. 12 +12. 8 - 5. 7 E. R. Squibb. 40. 00 36. 75 **29. 50. 31. 25 +16. 7 + 3. 8 Swift & Co. **39. 00 37. 00 **33. 50 38. 50 +14. 9 + 4. 1 United States Rubber. *47. 50 44. 00 38. 37 46. 37 +15. 4 + 1. United States Rubber. *47. 50 44. 00 38. 37 46. 37 +15. 4 + 5. 4 United States Steel. *39. 00 30. 00 **29. 12 31. 62 + 75. 9 - 19. 0 Utility Common Stocks Dow-Jones Average. *42. 50 78. 25 **50. 25 64. 50 +22. 4 + 6. 5 Detroit Edison. *35. 70. 25. 50. 31. 50. 43. 50. 43. 40. 7 + 13. 8 Pacific Gas & Electric 3. 50. 00 35. 70. **27. 50. 12. 57. 50. 40. 7 + 13. 8 Pacific Gas & Electric 3. 50. 00 35. 70. **27. 50. 40. 7 + 13. 8 Pacific Gas & Electric 3. 50. 00 35. 70. **27. 50. 50. 50. 31. 50. + 3. 40. 40. 40. 40. 40. 40. 40. 40. 40. 40	American Woolen	*15.75	25.00	23 12	35 25	452.5	+36.0	
Bethlehem Steel								
Chrysler Corp.								
E. I. du Pont de Nemours. 85 37 80 00 65 50 77.75 +18.7 -2.8 General Electric. 50 50 49 12 41 25 48 00 +16.4 -2.3 General Motors 99 12 97 25 76 50 90 12 +17.8 -7.3 Gimbel Brothers 18.62 18.00 14.12 18 00 +27.5 B. F. Goodrich 110 50 98 75 83 00 109 75 +32 2 +111.1 Gulf Oil. 973 75 72 00 62 50 73.62 +17.8 +2.3 International Harvester. 931 37 28 37 25 12 30.25 +20.4 +6.6 Johns-Manville 51 50 49 00 **36 50 41 00 +12 3 -16.3 Radio Corp. 23 25 22 00 14 62 18.12 +23.9 -17.6 E. R. Squibb. 40 00 36 75 **29 50 31.25 +5.9 -15.0 Standard Oil (N. J.) *82 50 78.25 **09.62 81 25 +10.7 +3.8 Swift & Co. *39 00 33 00 **33 50 38 50 +14 9 4.1 United Pruit. 65 37 64 25 **50 50 44 50 +22.8 +0.4 United States Rubber *47 50 44 00 38 37 60 37 50 +22.8 +0.4 United States Rubber *47 50 44 00 38 37 60 37 50 +22.8 +0.4 United States Rubber *47 50 44 00 38 37 60 37 50 +22.8 +0.4 United States Rubber *47 50 44 00 38 37 60 37 50 +22.8 +0.4 United States Rubber *47 50 44 00 38 37 60 37 50 +22.8 +0.4 United States Basel *39 00 30 00 **20 12 31 52 +5.9 -19.0 United States Basel *39 00 30 00 31 00 38 00 +22.6 +5.6 Westinghouse Electric 36 00 36 00 **29 12 31 62 +27.9 -19.0 Utility Common Stocks Dow-Jones Average 44 26 43 95 **37 40 38 67 +3.4% -12.2% Cleveland Electric Bluminating 547 50 845 37 **21 37 22.7 55 -6.5 -4.7 New England Electric System 13 12 12 75 **10.25 11.25 +9.8 -7.8 Pacific Gas & Electric 35 00 *35 57 50 00 25 51 1.25 +9.8 -7.8 Pacific Base & Santa Fe **12.25 **11.25 **10.8 Railroad Common Stocks Dow-Jones Average **13 72 70 00 **23 73 75 75 75 75 75 75 75 75 75 75 75 75 75								
General Foods								
General Foods	General Electric	50 50	49 12	41 25	48 00	+16.4	- 23	
Gemeral Motors 99 12 97 25 76 50 90 12 +17 8 73 Gimbel Brothers 18 62 18 00 14.12 18 00 +27.5 B. F. Goodrich 10 97 37 5 72 00 62 50 73 02 +17 8 +2.3 International Harvester 131 37 28 37 25 12 30.25 +20.4 +6.6 Johns-Manville 51 50 49 00 **36 50 41 00 +12 3 -16.3 Radio Corp. 23 25 22 00 14 62 18 12 +23.9 -17.6 B. R. Squibb 54 50 49 00 **36 50 41 00 +12 3 -16.3 Radio Corp. 23 25 22 00 14 62 18 12 +23.9 -17.6 E. R. Squibb 40 00 36 75 **29 .50 31 .25 +5.9 -15.0 Standard Oil (N. J.) *82 50 78 25 09.62 81 25 +10.7 +3.8 Swift & Co. *9.90 03 70 **33 50 38 50 +14 9 4.1 United Pruit 65 37 64 25 **50 25 64 50 +12.9 +4.1 United States Rubber *47 50 44 00 38 37 60.37 +15 4 +5.4 United States Steel *9.90 03 00 00 **20 15 16 2 +27.9 -19.0 Utility Common Stocks Dow-Jones Average 44 26 43 95 **37 40 38 67 +3.4% -12.2% Cleveland Electric Illuminating 547 50 845 37 **25 10 27.75 50								
Gimbel Brothers								
B. F. Goodrich. *10 50 98 75 83 00 109 75 +32 2 +11.1 Gull Oil. *73 75 72 72 00 62 50 73 .62 +17.8 +2.3 International Harvester. *31 37 28 37 25 12 30 .25 +20 4 +6.6 Johns-Manville. 51 50 49 00 **26 50 41 .00 +12 3 -16.3 Radio Corp. 23 25 22 00 14 62 18 .12 +23.9 -17.6 Sears, Roebuck & Co. 48 50 47 87 **40 00 45.12 +12.8 -5.7 B. R. Squibb. 40 00 36 75 **29 50 31 .25 +16.7 +3.8 Smift & Co. *39 00 37 00 **33 50 38 50 +14 9 4.1 United Truit. 53 37 64 25 **50 25 64 50 +16.9 -9.2 United Pruit. 65 37 64 25 **50 25 64 50 +22.8 4 0.4 United States Rubber. *47 50 44 00 38 .37 46 .37 +15 4 +5.4 United States Steel. *39 00 30 00 **29 12 31 62 +8.6 -12.2 Zenith Radio. *70 25 6.3 75 40 37 51 62 +27 9 -19 0 Utility Common Stocks Dow-Jones Average. 44 26 43 95 **37 40 38 .67 +3.4% -12.0% Cleveland Electric Illuminating. 547 50 845 37 **5818 37 839 12 +1.7 -13.8 Commonwealth Edison 6 N. Y. 33 52 32 75 **26 12 27.75 +6.2 -15.3 Detroit Edison. *24 70 23 84 37 **38 83 83 83 91 2 +1.7 -13.8 Pacific Gas & Electric System. 13 12 12 75 **10.25 11.25 +6.5 -4.7 Railroad Common Stocks Dow-Jones Average. *6.3 40 55 85 51 1.24 63 38 +23 7% +13.5 9 Philadelphia Electric System. 13 12 12 75 **10.25 11.00 +7.3 -10.2 Railroad Common Stocks Dow-Jones Average. *6.3 40 55 85 51 24 63 38 +23 7% +13.5 % Atlantic Coast Line. *56 00 46 75 42 00 \$25 50 22 50 11.25 +3.5 -4.7 Chesapeake & Ohio. *31 37 12 25 **10 25 11.00 +7.3 -10.2 Railroad Coammon Stocks Dow-Jones Average. *6.3 40 55 85 51 24 63 38 +23 7% +13.5 % Atlantic Coast Line. *65 00 46 75 42 00 \$25 50 22 55 11.0 +7.3 -10.8 Hillinois Central. *48 37 41 00 35 52 45 75 +25 5 +11.6 Louisville & Nashville. *48 37 41 00 35 52 45 75 +25 5 +11.6 Louisville & Nashville. *48 37 41 00 35 52 45 75 +25 5 +11.6 Louisville & Nashville. *48 37 41 00 35 52 45 75 +25 5 +11.6 Louisville & Nashville. *48 37 41 00 35 52 45 75 +25 5 +11.6 Louisville & Nashville. *48 37 41 00 35 52 45 75 +25 5 +11.6 Louisville & Nashville. *48 37 41 00 35 52 45 75 +25 5 +11.6 Louisville & Nashvill								
Call Oil.								
International Harvester **31 37 28 37 28 30 25 12 30,25 +20,4 +6,6 Johns-Manville **51 50 49 00 **36 50 41 00 +12 3 -16,3 Radio Corp. 23 25 22 00 14 62 18 12 +23,9 -17.6 Sears, Roebuck & Co. 48 50 47 87 **40 00 45,12 +12,8 -5,7 E. R. Squibb 40 00 36 75 **29 50 31,25 +5,9 -15,0 Standard Oil (N. J.) **82 50 78 25 69,62 81,25 +16,7 +3,8 Swift & Co. **59 00 37 00 **33,50 38 50 +14 9 +4,1 Union Carbide & Carbon 51 00 49 0 **40 12 44 50 +10 9 -9,2 United States Rubber **47,50 44 00 38,37 46,37 +15 4 +5,4 United States Steel **99 00 36 00 **29 12 31 62 +8,6 -12,2 Zenith Radio **70 25 63,75 40 37 51,62 +27,9 -19,0 Utility Common Stocks Dow-Jones Average 44 26 43 95 **33 40 38,67 +3,4% -12,0% Cleveland Electric Illuminating 547 50 545 37 **25 18 37 **38 37 **39,12 +1,7 -13,8 Consolidated Edison of N. Y 33 62 32 75 **26 12 27,75 +6,2 -15,3 Detroit Edison 24 00 23,87 **21 37 22,75 +6,5 -4,7 New England Electric 35 75 35 37 **21 37 22 75 +6,5 -4,7 Palife Gas & Electric 35 75 35 37 **21 37 22 75 +6,5 -4,7 Railroad Common Stocks Dow-Jones Average **63 40 52 88 51 24 63 38 +23 7% +13.5% Atlantic Coasa Line **60 00 **31 12 20 0 **27 50 22 5 11 00 +7,3 -10.2 Railroad Common Stocks Dow-Jones Average **63 40 55 85 51 24 63 38 +23 7% +13.5% Atlantic Coasa Line **60 00 47,7 5 42 00 55 00 31 50 +3 3 -10.9 Atlantic Coasa Line **60 00 47,7 5 42 00 55 00 51 22 00 +16,2 4.3.2 Atlantic Coasa Line **60 00 47,7 5 42 00 55 00 51 22 00 +16,2 4.3.2 Atlantic Coasa Line **48 37 41 00 35 62 45 75 +28 5 +11.6 Louisville & Nashville **44 30 37,75 35 50 42 62 +21 8 +12.9 New York Central **48 37 41 00 35 62 45 75 +28 5 +			72.00	62.50	73 62	+17 8	+ 2.3	
Johns-Manville								
Radio Corp. 23 25 22 00 14 62 18 12 +23.9 -17.6								
Sears, Roebuck & Co. 48 50 47 87 **40 00 45 12 +12 8 -5.7								
Standard Oil (N. J.)								
Standard Oil (N. J.)	R R Sanibb	40.00	36.75	**29 50	31 25	+ 50	-15.0	
Swift & Co.								
United States Rubber.								
United States Rubber. *47, 50								
United States Steel								
United States Steel	United States Rubber	*47.50	44.00	38.37	46.37	+15 4	+ 5.4	
Westinghouse Electric 36 00 36 00 **29 12 31 62 + 8 6 -12 2			36.00	31.00	38.00	+22.6	+ 5.6	
Tillity Common Stocks								
Dow-Jones Average			63.75		51.62	+27.9	-19.0	
Dow-Jones Average	Utility Common Stocks							
Cleveland Electric Illuminating. \$47 50 \$45 37 **esl8 37 \$39 12 + 1.7 -13.8		44 . 26	43 95	**37.40	38.67	+ 3.4%	-12.0%	
Consolidated Edison of N. Y. 33 6/2 32 75 6*26 12 27.75 + 6.2 -15.3 Detroit Edison. 24 00 23.87 6*221.37 22.75 + 6.5 - 4.7 New England Electric System 13 12 12 75 6*10.25 11.25 + 9.8 - 7.8 Pacific Gas & Electric 35.7 5 35.37 6*30.50 31.50 + 3.3 -10.9 Philadelphia Electric 27 87 27 00 6*23.37 25.12 + 7.5 - 7.0 Southern California Edison 36.75 36.00 6*31.25 32.12 + 2.8 -10.8 Southern Co. 13.75 12.25 6*10.25 11.00 + 7.3 -10.2 Railroad Common Stocks Dow-Jones Average 6*0.3 40 55.85 51.24 63.38 +23.7% +13.5% Atchison, Topeka & Santa Fe 6*12.8 87 \$118.25 \$105.00 \$122.00 + 16.2 + 3.2 Atlantic Coast Line. 6*50.00 46.75 42.00 55.00 \$312.00 + 16.2 + 3.2 Atlantic Coast Line. 6*0.00 40.00 6*31.27 00 6*25.00 29.25 +17.0 + 8.3 Great Northern [Pfd.) 44.25 35.87 6*3.30 30.39 75 +20.5 +10.8 Illinois Central 6*1.25 87 81.35 87 8*33.00 39.75 +20.5 +10.8 Illinois Central 6*1.25 87 81.35 87 8*33.00 39.75 +20.5 +10.8 Illinois Central 6*1.25 87 81.35 87 8*33.00 39.75 +20.5 +10.8 Illinois Central 7*1.25 87 87 8*33.00 39.75 420.5 +10.8 Illinois Central 8*1.37 13.50 11.62 14.12 +21.5 +4.6 Pennsylvania 19.12 16.00 6*14.50 18.12 +25.0 +13.2 Southern Pacific 6*0.2 50.5 57.5 8*40.00 59.25 +20.9 +6.3 Southern Railway 42.25 30.75 33.25 40.25 +21.1 +9.5	Cleveland Electric Illuminating.	\$47 50	\$45 37	**\$38 37	\$39.12	+ 1.7	-13.8	
Consolidated Edison of N. Y. 33 62 32 75 **26 12 27.75 + 6.2 -15.3 Detroit Edison. 24 00 23.87 **21.37 22.75 + 6.5 - 4.7 New England Electric System. 13 12 12 75 **10.25 11.25 + 9.8 - 7.8 Pacific Gas & Electric. 35 75 35 37 **20.50 31 50 + 3.3 -10.9 Philadelphia Electric. 27 87 27 00 **23.37 25 12 + 7.5 - 7.0 Southern California Edison. 36 75 36 00 **31 25 32.12 + 2.8 -10.8 Southern Co. 13 75 12 25 **10 0 + 7.3 -10.2 Railroad Common Stocks Dow-Jones Average *6.3 40 55 85 51 24 63.38 +23.7% +13.5% Atchison, Topeka & Santa Fe **12.8 87 **118.25 **510.500 **510 **510 **510 **510 **510 Atchison, Topeka & Santa Fe **512.8 87 **5118.25 **510.500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **5500 **510 **5500 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500 **510 **5500	Commonwealth Edison	33 12	32 00	**27 50	27 50		-14.1	
New England Electric System	Consolidated Edison of N. Y	33 62	32 75	**26 12	27.75		-15.3	
Pacific Gas & Electric 35 75 35 37 **00 50 31 50 + 3 3 -10 9 Philadelphia Electric 27 87 27 00 **23 37 25 12 + 7 5 -7 0 Southern California Edisson 36 75 36 00 **31 25 32 12 + 7 5 -7 0 Southern Co. 13 75 12 25 **010 25 11 00 + 7 3 -10 .8 Southern Co. 13 75 12 25 **010 25 11 00 + 7 .3 -10 .2 Railroad Common Stocks Dow-Jones Average *6.3 40 55 85 51 24 63 .38 +23 7% +13 .5% Atchison, Topeka & Santa Fe **3128 87 **5118 .25 5105 00 5122 00 +16 .2 +3 .2 Atlantic Coast Line **56 00 40 75 42 00 55 00 431 0 +17 .7 Chesapeake & Ohio *31 37 27 00 **25 00 29 25 +17 0 + 8 .3 Great Northern [Pfd.] 44 25 35 87 **33 00 30 75 +20 5 +10 8 Illinois Central **44 37 41 00 35 62 45 75 +20 5 +11 6 Louisville & Nashville **43 50 37 75 35 50 42 62 +21 8 +12 9 New York Central 15 37 13 50 11 62 14 .12 +21 5 +4 6 Pennsylvania **19 12 16 00 **14 30 18 .12 +25 0 +3 .2 Southern Pacific **62 50 55 75 **49 00 59 25 +20 0 +6 .3 Southern Railway **42 25 30 75 33 25 40 25 +21 1 +9 .5	Detroit Edison	24 00	23.87	**21 37	22.75	+ 6.5	- 4.7	
Pacific Gas & Electric 35 75 35 37 **00 50 31 50 + 3 3 -10 9 Philadelphia Electric 27 87 27 00 **23 37 25 12 + 7 5 -7 0 Southern California Edisson 36 75 36 00 **31 25 32 12 + 7 5 -7 0 Southern Co. 13 75 12 25 **010 25 11 00 + 7 3 -10 .8 Southern Co. 13 75 12 25 **010 25 11 00 + 7 .3 -10 .2 Railroad Common Stocks Dow-Jones Average *6.3 40 55 85 51 24 63 .38 +23 7% +13 .5% Atchison, Topeka & Santa Fe **3128 87 **5118 .25 5105 00 5122 00 +16 .2 +3 .2 Atlantic Coast Line **56 00 40 75 42 00 55 00 431 0 +17 .7 Chesapeake & Ohio *31 37 27 00 **25 00 29 25 +17 0 + 8 .3 Great Northern [Pfd.] 44 25 35 87 **33 00 30 75 +20 5 +10 8 Illinois Central **44 37 41 00 35 62 45 75 +20 5 +11 6 Louisville & Nashville **43 50 37 75 35 50 42 62 +21 8 +12 9 New York Central 15 37 13 50 11 62 14 .12 +21 5 +4 6 Pennsylvania **19 12 16 00 **14 30 18 .12 +25 0 +3 .2 Southern Pacific **62 50 55 75 **49 00 59 25 +20 0 +6 .3 Southern Railway **42 25 30 75 33 25 40 25 +21 1 +9 .5	New England Electric System	13.12	12.75	**10.25	11.25	+ 9.8	- 78	
Philadelphia Electric 27 87 27 90 **23 37 25 12 + 7 5 - 7 0	Pacific Gas & Electric	35 75	35 37	**30 50	31.50	+ 3 3	-10 9	
Southern California Edison			27.00	**23 .37	25 12	+ 7.5	- 7.0	
Raifroad Common Stocks Property Proper			36.00	**31 25	32.12	+ 28	-10.8	
Dow-Jones Average	Southern Co	13 75	12.25	**10 25	11.00	+ 7.3	-10.2	
Atchison, Topeka & Santa Fe. *\$125 87 \$118 25 \$105 90 \$122 00 + 16.2 + 3.2 Atlantic Coast Line. *50.00 46 75 42 00 55 00 + 31 0 + 17.7 Cheaspeake & Ohio *31 37 27 90 **25 90 29 25 + 17 0 + 8 3 Great Northern (Pfd.) 44 25 35 87 **33 90 39 75 + 20.5 + 10.8 Illinois Central *48.37 41 00 35 62 45 75 + 28.5 + 11.6 Louisville & Nashville *43 50 37 75 35 90 42 62 + 21.8 + 12.9 New York Central 15.37 13.50 11.62 14.12 + 21.5 + 4.6 Pennsylvania *19 12 16.00 **214 50 18.12 + 25.0 + 13.2 Southern Pacific *62 50 55 75 **49 90 59 25 + 20.9 + 6.3 Southern Railway *42 25 36 75 33 25 40 25 + 21.1 + 9.5	Railroad Common Stocks							
Atlantic Coast Line. *56.00	Dow-Jones Average	#63 40	55 85	51.24	63 38	+23 7%	+13.5%	
Chesapeake & Ohio	Atchison, Topeka & Santa Pe	*\$125 87	\$118.25	\$105.00	\$122 00	+16.2	+ 3.2	
Great Northern (Pfd.) 44 25 15 87 **33 00 39 75 +20 5 +10 8 Illinois Central *48 37 41 00 35 62 45 75 +28 5 +11 .6 Louisville & Nashville *43 50 37 75 35 00 42 62 +21 8 +12 9 New York Central 15 37 13 50 11 .62 14 .12 +21 5 +4 6 Pennsylvania *19 12 16 .00 **914 50 18 .12 +25 0 +13 .2 Southern Pacific *62 50 55 75 **49 00 59 25 +20 9 +6 .3 Southern Railway *42 25 36 75 33 25 40 .25 +21 1 +9 .5	Atlantic Coast Line		46 75			+31.0	+17.7	
Illinois Central	Chesapeake & Ohio	*31 37	27 00					
Louisville & Nashville	Great Northern (Pfd.)	44 25	35 87	**33 00	39 75	+20 5	+10 8	
New York Central 15 37 13 50 11 62 14 12 +21 5 + 4 6 Pennsylvania *19 12 16 00 *914 50 18 12 +25 0 +13 .2 Southern Pacific *62 50 55 75 *949 00 59 .25 +20 .9 + 6 .3 Southern Railway *42 25 36 75 33 25 40 .25 +21 .1 + 9 .5	Illinois Central	*48.37	41 00	35.62	45.75	+28 5	+11.6	
Pennsylvania. *19 12 16 00 *14 50 18 12 +25 0 +13 .2 Southern Pacific *62 50 55 75 *49 00 59 .25 +20 9 +6 .3 Southern Railway *42 25 36 75 33 25 40 .25 +21 1 +9 .5	Louisville & Nashville	*43 50	37 75	35.00	42 62	+21 8	+12 9	
Southern Pacific *62 50 55 75 **49 00 59 25 +20 9 + 6.3 Southern Railway *42 25 36 75 33 25 40 25 +21 1 + 9.5	New York Central							
Southern Railway *42 25 36 75 33 25 40 25 +21 1 + 9.5	Pennsylvania	*19.12					+13.2	
	Southern Pacific	*62 50	55 75	**49 00	59.25	+20.9	+ 6.3	
Union Pacific							+ 9.5	
	Union Pacific	*99 75	85.12	81.00	99.25	+10.2	+16.6	

^{*} Registered since Korean incidents started. ** 1950 low.







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CONTAINERS FOR LIQUIDS, GASES AND SOLIDS

LABOR

Steel Pay Boost?

Murray calls meeting of union board as auto industry raises foreshadow new over-all pattern to meet living costs.

Philip Murray has called a special meeting of the executive board of his steelworkers' union for Sept. 21 in Pittsburgh. Those who have inquired were told that the union officials will talk about how pension contracts are working. No one will be surprised if the steelworkers talk about getting a wage increase before Jan. 1-the date their contracts call for possible adjustments

Even if Murray actually pulls a wage offer from the industry out of his pocket, it will come as no great shock to anyone.

• Increases Everywhere-Rumors of imminent wage boosts in steel and other industries are everywhere. Detroit has forged a new, pre-wage-control pay pattern. And its effects cannot be confined to the auto industry. They never have been before

Steel, electrical manufacturing, rubber, glass, textiles, and other highly unionized industries face these hard

A year in which they expected unchanged wage rates is suddenly bringing substantial advances in labor costs.

A year for which a quiet labor front had been widely forecast has become a season of wildcat striking and labor

A year in which few important new contracts had to be negotiated has become a year in which contracts get brushed aside.

Korea made the difference. The little hot war has brought a jump in the cost of living, need for increased production, the possibility of labor shortages, and the specter of price and wage control.

· Chrysler, Ford-The auto industry was first to react.

On the heels of the voluntary raise of 10¢ an hour at Chrysler Corp., Ford Motor Co. fell into line last weekend -after a 60-hour marathon of negotiation with the CIO United Auto Workers. Only a few weeks earlier, Ford had rejected union demands for a contract reopening four months ahead of schedule. Then, with wildcat strikes throttling its production, the company wrote an entirely new agreement with UAW.

It gave direct raises averaging about

9¢, including an 8¢ raise across the board and 5¢ additional for skilled workers. Equally notable, it included 4¢-an-hour annual raises for five years of the contract, and an escalator clause based on the Burcau of Labor Statistics' living-cost index. Like the annual raise, the escalator is pegged to the General Motors pattern, with rates going up or down a cent for each 1.14-point change in the BLS index.

There were indirect raises beyond that, worth 8¢ or 9¢ more, the union figures. Pension payments were advanced from \$100 (for 65-year-old workers retiring after 30-year service) to \$125, social security included. Disability benefits under the retirement plan were also enlarged. Three-week vacation pay goes to workers with 15-year seniority.

• Pressures—The new contract, which continues until June 1, 1955, was written after a preliminary meeting between Henry Ford II and Walter Reuther, president of UAW. Ford people acknowledged that Chrysler's 10€ | advance in August had compelled them to recognize a new auto industry pattern.

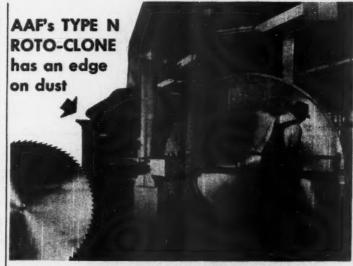
They were also strongly influenced by strikes which broke out in one Rouge department after another following the Chrysler deal. Their local union took the bald position that it could not be held responsible for these walkouts as long as Ford refused to adjust wages.

• The Big Push—Other Detroit companies were busy adjusting rates. After Chrysler, Briggs Manufact ing Co. and Motor Products Corp. had given extracontractual raises of 5¢ and 10¢ respectively, Budd Corp. gave a nickel, Midland Steel and Ainsworth 10¢ apiece, Hudson 7¢. The big push was on—resulting directly from the Chrysler dime, indirectly from the General Motors escalator clause. That clause advanced rates 5¢ at the start of September.

An irony of the entire situation is the report that General Motors workers themselves are becoming restive—even though their pay raises first put the living-cost picture in dramatic focus. Many GM people in Detroit plants are contending that they, too, are entitled to money outside of their contract.

Other unions in the Detroit area, naturally enough, were the first to react outside of the auto workers. The independent United Electrical Workers are known to have asked voluntary raises. The CIO Electrical Workers, meanwhile, are using the GM 5# hourly raise and the Chrysler dime as an argument for large raises now at General Electric.

• Prices-To date, the higher auto pay rates have not been reflected in in-



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creased prices. But there are clear indications that they will be when 1951 auto models are introduced. This is implicit in the following statement, made by Ernest Breech, Ford's executive vice-president:

"In the long run, wage increases can be financed only out of increased production. Increases in wages in excess of actual gains in productivity must be reflected ultimately in price increases if the company is to maintain a sound economic position.'

A period of conversion to armament work and of material shortages can hardly be a period of high productivity.

THE LABOR ANGLE

AST WEEK, John L. Lewis in a letter to William Green scornfully rejected proposals for a no-strike pledge. There has been widespread inclination to dismiss his letter as a piece of whimsey. That is a mistake.

Over the past few years, Mr. Lewis has found occasion to address a number of communications to his once-close associate, Mr. Green. Invariably ironic, these exchanges make good newspaper copy. They are relished by those who belong to the pachydermatous school of humor. And they give a

kind of Gallagher-Sheehan air to

THE LATEST Lewis note, in tone at least, was of a piece

high-level labor politics.

with the others. It said:

"You know, Bill, that I am ever distressed when I have to disturb the calm placidity of your ordered existence. Yet I suggest that the rights of American workers in industry should not be bartered to appease your innate craving for orthodox respectability. Consideration of the following items is therefore indicated:

"(1) Although the Mine Workers have espoused labor unity, you have stipulated them out of the unity conferences. It follows that any mess you cook up with the CIO, if you can cook up any mess with the CIO, will, of course, have to be eaten by you, and you alone. We do our own cooking.

"(2) You have stipulated the Mine Workers out of representation on the select, star chamber labor committee which you designated to please Symington. We gently advise that we will not be bound by your deliberations or commitments conducted or made in our absence. We do our own committing.

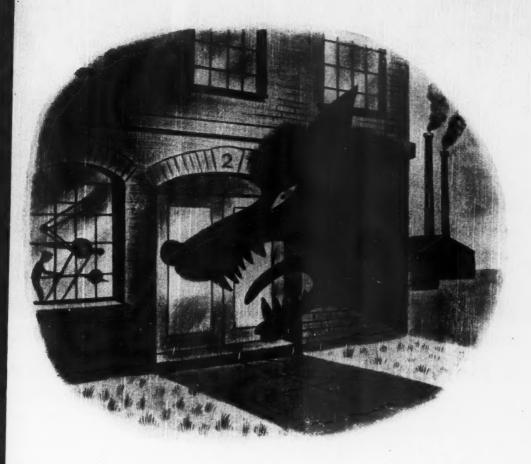
"(3) The press chronicles you as plodding about the country seeking someone to whom you can give a 'no-strike pledge.' I am sure that you will pardon me when I suggest that the Mine Workers are not yet ready for you to sell them down the river. Restrict pledges to your own outfit. We do our own nostriking."

LEWIS is doing more here than aiming a sarcastic shaft at Green. He is in reality talking beyond Green-to Symington and Truman.

To perceive his meaning, one of the theories offered to explain the Korean War might be recalled. Just before the North Koreans attacked, it looked as though the Western Powers were about to begin serious discussion of a peace treaty for Japan. Russia was to be excluded from those discussions. When the Russian puppets in Korea launched their war, it served to remind the Japanese and other Asiatic peoples that the Western Powers could make any treaty they saw fit. But unless Russia was a party to it, there would be no peace.

From the Kremlin to Lewis' sumptuous office in Washington is a long way. But there is a universality to the technique of power politics. The Administration, pursuing labor peace and economic stability, may make a fine-sounding deal with the AFL and CIO. It may win their unstinting cooperation. But unless the chief of the union which holds sway in the nation's coal industry is satisfied, labor peace is tenuous and wage stabilization uncertain.

THAT IS WHAT Lewis is telling Symington and Truman in his letter to Green. He could have done it by reminding them how the Mine Workers, snubbed by Roosevelt, went their own way upsetting patterns and keeping the labor front in an uproar during the last war. He was in character, however, when he chose to make his point by lampoon.



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"Look Ahead - Look South!"

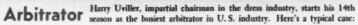
Ernest E. Norris



SOUTHERN RAILWAY SYSTEM

The Southern Serves the South







Dress designer creates a new fall num

and a new labor dispute for Uvil

A Nervous Industry Finds Labor Peace

Intense competition, high company mortality, and a capricious market make the manufacture of ladies' garments one of the great ulcer-producing industries of America. With all its natural hazards, it would be an altogether impossible business if it had even a normal amount of labor trouble. Luckily, it hasn't.

That's because 20 years ago AFL's International Ladies' Garment Workers Union—which covers women's clothing manufacturing—and five employers' associations got together to establish an arbitration authority to safeguard labormanagement peace. Everyone concerned understood clearly that business survival and employee jobs depended

on keeping production uninterrupted by labor disputes.

To get that done, the union and the employers put up \$125,000 per year to budget an "impartial chairman" office. Every argument that arises in the workshops within a 100-mile radius of New York City comes to the chairman for settlement if it cannot be disposed



3 Dispute begins here—when manager puts an 80¢ piece rate on sewing operation.



4 Seamstress (left) and union shop steward check amount of work required to finish garme figure 80¢ rate is too low. They think it's worth \$1. (TURN TO PAGE 1)



The new dress is macked up here for first operations in the workroom.

y Arbitration

of in direct negotiations. But production keeps right on going while the dispute is being settled. The final award of the chairman then applies retroactively.

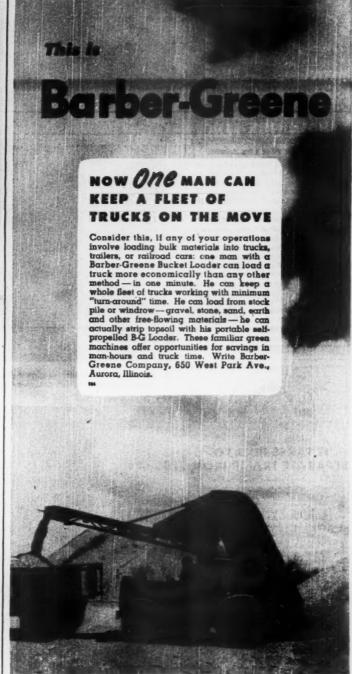
For the last 14 years, the impartial chairman has been Harry Uviller. The fact that Uviller used to head an employers' association and still was acceptable to the union attests to the maturity of the labor-management relationship. He has never had to issue an award to stop a strike and never had an award provoke a strike.

To those who know the industry, Uviller is unique, not because of his post, but because he's held it so long. And it looks as though he will keep the

job as long as he wants it.

A gaunt man in his 50's, Uviller was trained in the law, grew up in the industry. His constant attachment to a cigar is the only habit which betrays the extreme tension under which he works.

Last year, Uviller's office had 3,615 cases come to it for settlement. That is more than all the arbitrations in General Motors, U.S. Steel, Chrysler, and Ford put together. This year, with the needle trades looking forward to a busy season with radical style changes, Uviller expects to be even busier.



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ARBITRATION (Continued from page 117)



5 Steward tells production manager (right) he doesn't think the rate is high enough, tri to show him \$1 worth of work in the operation. The boss is unconvinced.



8 Uviller makes a careful check of the dress, hears company and union sides. Besid knowing shop politics, he has to understand needlework and materials thorough



So dispute goes to company president —who phones Uviller for a hearing.



7 Disputed dress goes to Uviller's office for a first look. Hearing is then set.



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LABOR BRIEFS

A consumer boycott, peacefully conducted by a union, doesn't violate the T-H law. NLRB so ruled in directing Hoover Co., Canton, Ohio, to reinstate 12 UE officials fired after a two-month strike in 1948. The union leaders sponsored the boycott in the midst of the strike, refused to call it off afterward.

Security officers are planning to crack down on pro-Communist unions operating in vital defense plants. Steps already taken in atomic-energy plants, throughout the maritime industry, and on West Coast docks are just the beginning.

The leftist March of Labor, a monthly magazine, has been revived to push the Communist party line in the labor movement. A major article proclaims the strength of the left-wing United Electrical Workers, accuses Philip Murray and Walter Reuther of signing "sweetheart" agreements in steel and autos.

The 1950 directory of labor unions, published by the Dept. of Labor, is off the press. Write your congressman for a copy, or ask for it directly from the Bureau of Labor Statistics.

Employees in your cafeteria or restaurant may upset your industrial relations picture. A new NLRB doctrine holds that restaurant employees in a department store may have a separate bargaining unit—even if the workers are treated no differently from other workers and have never had a separate bargaining group of their own.

Bankers Life Co., Des Moines, will underwrite the pensions guaranteed to 29,900 workers, employed by Allis-Chalmers.

IUE-CIO, the anti-Communist electrical union, has postponed from Sept. 11 to Dec. 4 the convention at which it was going to elect officers. Its reasonate the current dispute with General Electric

The Pictures—Cover by A. Richter. Harris & Ewing—cover photo, 56; Int. News—52, 53, 76, 77; Wide World—50, 125; Dick Wolters—116, 117, 118, 119.



Photo by Yilo

"They took a hint from me"

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INTERNATIONAL OUTLOOK

BUSINESS WEEK SEPTEMBER 9, 1950



Look for three big changes in the U. S. foreign aid setup:

- (1) Unified direction of all aid-military, economic, and Point 4.
- (2) More emphasis on help for Asia, probably a "Little Marshall Plan" for that area.
 - (3) Tighter U. S. control over spending of funds.

The merger of foreign aid operations will be urged in the forthcoming report of the Gordon Gray Committee.

The Gray report will stress this fact: Failure to integrate foreign aid has meant that billions of dollars have leaked away since World War II.

(Gray, former Secretary of the Army, was asked last Spring to report on Western Europe's dollar gap problem after 1952. But because of the Korean war, the report will now cover the whole story of U.S. foreign economic policy.)

There's bound to be controversy over one part of the proposed new policy—tighter U. S. control abroad.

The idea is to tie aid, in some cases, strictly to political and economic conditions; in others, to have the U.S. supervise all spending.

Washington knows this policy will provoke Communist cries of "imperialism." But we seem ready to risk this after what's happened in the Philippines and Greece.

The Philippines are now cited as a prize example of how not to handle foreign aid operations.

Hundreds of millions of dollars have been dissipated because there was no over-all program. Economic chaos and political unrest continue to plague the islands.

In Greece, by contrast, the U.S. held a tight rein. Economic recovery and relative political stability are the reward.

Will the Chinese Communists get into the Korean war? Washington is desperately trying to forestall that.

You can see this from recent U. S. diplomatic moves: Truman's statement that we have no ambitions in Formosa, that the Seventh Fleet will clear out when the Korean fighting ends.

There's even a chance that Washington might agree to let the Chinese Communists join in when the United Nations takes up Formosa's future.

The danger point will come when the tide really turns in South Korea.

Despite this week's military setbacks, it seems certain now that the North Koreans can't win unless Stalin pitches in with more fire power and new armies. (The new armies would come from China.)

That brings up these crucial questions: Is Stalin ready to pay such a price to win in South Korea? Can he get the Chinese Communists to fight there for him?

The sights are being raised on Western Europe's defense program.

The deputies of the North Atlantic Council want a frontline force in Europe of 40 divisions—with 20 more in reserve. The deputies, who met in London last week, say these forces should be ready within a year.

The European powers want longer—18 months or more. That leaves the decision up to the Western foreign ministers when they meet in New York

INTERNATIONAL OUTLOOK (Continued)

BUSINESS SEPTEMBER 9, 1950 in mid-September. If Acheson, Bevin, and Schuman decide on the accelerated timetable, Western Europe feels the price will be steep (page 125).

The French aren't satisfied with the London decisions.

When the foreign ministers get together, Schuman will press Acheson and Bevin to commit themselves on three things:

- (1) More integration of the defense effort. The French want a financial pool, a combined production board, and a raw materials allocation board.
- (2) More U. S. and British troops in Europe. The French say the U. S. is ready to send only five new divisions to the Continent and the British four as against the 20 divisions the French will raise. Paris thinks this isn't fair.
- (3) An Elbe defense line. The French want most of the Western forces to be stationed at the point of greatest danger—the Elbe River.

France this week got its first real taste of what the war effort will cost.

The Pleven government says that retail prices of bread and milk had gone up 5.5% in August. (Unofficial estimates put the increase at 10%.)

Then the government made a move of its own that will hurt. To help balance the budget, Pleven chopped 53-billion francs off state expenses. This will throw about 25,000 civil servants out of work.

French military men predict a big guerrilla offensive in Indo-China in October. They say that 40,000 of Ho Chi-minh's forces now are getting intensive training across the border in Communist China.

These French officials also expect trouble from Bao Dai, head of the anti-Communist government in Indo-China. They claim that Bao has become hard to work with because he believes the U. S. soon will replace France as the real ruler in Indo-China.

The London stock market is getting a boost from the recent loosening of British exchange controls. Non-British holders of sterling securities can now "switch" freely from one sterling stock to another. For example, an American who owns British Treasuries can sell them, use the proceeds to buy stocks in South African gold or diamond mines.

The U.S. is laying the groundwork for closer ties with Latin America.

Washington planners have their eyes on Latin America's big reserves of (1) military manpower, and (2) strategic materials.

The Pentagon is studying the possibility of shipping arms south of the border. There's even some talk of a Latin American legion to help out the U.N. in Korea-or elsewhere.

A major problem is how to arrange for more supplies of strategic materials for the U.S. stockpile. Latin Americans are leery about upping production without better guarantees from the U.S.

Washington is pleased with last week's devaluation of the Argentine peso. It looks like another step toward economic common sense in Buenos Aires.

The Argentines replaced their discriminatory system of nine special exchange rates with two. Over-all, there was a 36.5% cut in the peso.

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Argenting's sales in the U.S. ought to improve as a result.

BUSINESS ABROAD

Europe Rearms-But It Won't Be Easy



BRITISH SUPER TANK rolls down the line as European armament programs begin.

- Western Europe was slow to respond to the Korea crisis, but now it is beginning rearmament plans.
- Britain and France are ready to go; Germany and Italy have surplus manpower and plants that could build parts and supplies—helped by U.S. money.
- In the beginning, arms orders won't require much new plant and equipment. Most industries will handle them with present facilities.
- There'll be some inflation—and maybe controls later—but living standards won't suffer as long as productivity keeps increasing at present rates and orders don't get too big.
- Exports won't be hit during the early part of the program. In fact, shipments to the U.S. will rise, possibly enough to build up a trade surplus. But in the long run, European hard-goods exports will drop.
- One big question is whether Europe will cut down its nonessential capital spending.
- As time goes by, Europe will move closer to a war economy, but there are a lot of question marks, so no one can tell for sure what the ultimate effect on the entire economy will be.

First effects will be minor—a little inflation, some controls. But in the long run, rearmament is bound to hurt.

The Korean war hasn't hit Western Europe the way it has hit the U.S.—but it soon will. When the war broke out, Western Europe viewed the whole thing a lot more placidly than we did. But when the U.S. started running into serious reverses, Western Europe began to worry about its own defenses. So now, through the Atlantic Pact—plus some American pressure—the western nations are making rearmament plans.

Right now, you can't tell for sure how far Marshall Plan goals will have to be cut back. Most of the terms of the European defense equation are still unknown. Nobody knows how much manpower and equipment are needed, which countries will supply what, and who will pay the bill.

But here's what is known now:

 Western Europe is counting on \$2.5-billion in ECA during the coming year, plus another \$4-billion in U.S. arms aid. The total will be just about enough to cover half the new arms spending that's in the works.

 Britain and France, the two key countries in the planning, have programs going which will boost their defense spending to at least 10% of their national income.

 Germany and Italy both have surplus manpower and plant capacity that will probably be used for defense production.

With these facts, you can get some idea of what the economic consequences of rearmament may be in Western Europe.

Now if you take current plans as the basis of calculation, you can get a pretty good idea of the way things shape up:

Inflation. Prices are bound to go up. In France, the wholesale index has climbed since June from 2,100 to 2,700 (1938 equals 100). By next spring, wholesale prices will probably be up at least 5% in the ERP area as a whole.

Investment. Long-term investment will drop as capital-goods industries get loaded down with defense contracts. Investment could drop more than 25% in Western Europe next year.

Exports. During the first six months of rearmament, Western Europe's exports probably won't be hurt much. In



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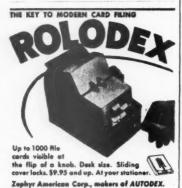
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fact, exports to the U.S. are sure to go up, perhaps enough temporarily to close the dollar gap. But after the first year, total exports to all countries will drop off by at least 15%.

Living standards. Civilian consumption shouldn't go down much if production keeps rising at the rate of the last two years, and if inflation doesn't get out of hand. But wealthy consumers' choice will be narrowed; there will be fewer cars, radios, television sets, washing machines, and woolen goods.

Controls. Direct government con-trols won't come back very fast. Western Europeans don't go for price con-trols today. But lifting of existing controls probably will be checked, and some will be re-imposed.

I. Ready for Munitions

Western Europe is in a much better condition to rearm today than it would have been two years ago. In some ways, its position is better than it was in

There's even some hope that rearmament can be handled with no greater loss than sacrificing future increases in civilian production. That's because expected increases in production may be enough to take care of rearmament. Here's why Western Europe's production and

productivity have been rising steadily since 1947. Taking 1938 as 100, pro-duction in the ERP countries (excluding West Germany) has risen this way: 107 in 1947; 119 in 1948; 129 in 1949.

Again taking 1938 as 100, the index for industrial output per man has been: 95 in 1947; 105 in 1948; 110 in 1949; (plus a further rise in productivity in 1950)

• Metalworking-It's true that, except in Germany and Italy, Europe has no substantial labor reserve. But the shift to munitions will be greatly eased by one big change: In the past 10 years, Western Europe's metalworking indus-tries have expanded greatly. Take a tries have expanded greatly. look at these figures, and you'll see what's happened: Taking 1938 as 100 and using stable prices, total manufacturing output in Western Europe in 1949 (excluding West Germany) was 128. But the index for output of metalworking industries stood at 150, while textiles were only 103. The same shift has taken place in Western Europe's exports. Total exports of manufactured goods in 1949 stood at 142. But exports from the metalworking industries were 219, textiles 101.

Even these figures don't really show the importance of this shift in Western Europe's production. They fail to reflect unused plant capacity, especially in Britain, Italy, and West Germany. There's enough capacity so that Western Europe won't require much new plant construction or basic retooling for armament.

In Britain, for example, arms orders are now being handled without any disruption of exports or civilian supplies. Austin Motors got a big order for military vehicles last month. But the company won't have to cut car and truck production at all to handle this

II. Exports-Up, Down

Nevertheless, by the end of next year, British, French, Belgian, and Dutch exports are going to suffer. Hard-goods sales will be hit especially hard. The drop in total exports is expected to be at least 15%. But it will be even higher unless the soft-goods industries can increase their share of exports.

And by the third year of rearmament, the total effect of defense demands on capital-goods industries will cut even deeper into exports. The damage will be even greater if Germany and Japan are not allowed to produce arms but are permitted to concentrate on capturing world export markets for them-

selves.

• More Dollars-For six months to a year, Western Europe stands to gain, at least in its dollar trade, from the surge of rearmament in the West. That's the view of many Western European economists who expect the first phase of rearmament to hit the harder than Western Europe. They figure that until mid-1951 the bulk of new military equipment will be produced in the U.S. That, they say, will make the inflation pressure much stronger here than in Western

Besides, the U.S. will buy heavily across the Atlantic. American buyers already are scouring Western Europe for steel and scrap. Orders also are piling up for woolens, linens, china, liquors, wines, watches, laces, leather goods, benzene, and other scarce chemicals. In addition, of course, there's the big current U.S. demand for strategic materials from Europe's colonial dependencies.

On the basis of these estimates, economists in Paris this week guess that by the end of 1950 U.S. imports will be 20% higher than in June. That would pump an extra \$1.5-billion into

the world market.

At the same time, mounting short-ages in the U.S. will probably cut our exports by about \$1-billion. If this happens and Marshall Plan aid continues, Western Europe stands to gain a big dollar surplus during the early part of 1951.

· Fears-But economists in Washington are much less optimistic about Western Europe's future dollar position. They estimate that since June



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AT YOUR TOMBLE OF BUILDING MATCHIAL DIALER

Western Europe has lost \$250-million as a result of higher prices it has had to pay for imports from the U.S. The best guess in Washington is that Western Europe's dollar position may improve somewhat up to the middle of 1951, but then they figure it will begin to worsen.

A Western European trade surplus with the U.S. would be an unmixed blessing in any case. It would have an indirect inflationary effect. So will a continued rise in raw materials prices.

III. Budgets, Living Standards

But inflation pressure will result directly from rearmament, anyway. That's because workers will be channeled into armies and war plants where they draw pay but don't produce goods for civilian consumption.

In most Western European countries, however, no serious budgetary problems should arise for about a year. Munitions ordered now won't have to be paid for until then. So governments are likely to postpone their anti-inflationary measures until later.

• Time Bomb—Capital investment is sure to drop as the capital-goods industries start switching to defense contracts. And even though the effect on production and living standards may be delayed for a year or so, that doesn't mean it won't be felt in the end.

The real problem is whether governments will be prepared to cut back their own investment programs for non-essentials. For example, Britain has plans for more hospitals, and France wants to build more power stations. If these cutbacks can be carried out, the impact on industrial plants can be held at a reasonably safe level.

• Food Item—What happens to living standards depends on whether production continues to rise and whether inflation can be checked. Chances are, though, that during the first year living standards won't drop to politically dangerous levels. For one thing, food is the biggest item in the Western European worker's family budget, and food prices will probably rise more slowly than prices of manufactured goods.

Things could get much worse, of course, if unexpected dislocations, such as strikes, developed. Moreover, inflation is sure to bring unpredictable price fluctuations and upset the present balance of incomes as between various classes in Western Europe.

• Variations—The picture will vary from country to country. The British economy is stretched much tighter than the French. But politically, it will be



U.S. Firm to Water These Australian Acres

U. S. engineers have finally nailed down the contract for Australia's Big Eildon Dam, to be built just below the smaller dam in the picture above. Utah Construction Co., of Ogden, got the \$25-million job, beating out top-flight' competition from two U. S. firms—Guy F. Atkinson and Morrison-Knudsen, and from four British, one New Zealand, and three Australian outfits.

Big Eildon, located on the Goulburn River in Victoria, will be one of the largest earth dams in the world: half a mile across the crest, 260-ft. high (a third as high as Hoover Dam). It will contain 13-million cu. yd. of earth and rock fill, 200,000 cu. yd. of concrete work. When it's finished, the old dam will be completely under water.

The dam is part of the largest public works project in Australia's history, increasing irrigated acreage below the dam fourfold. That will mean rich farmland to help take care of Australia's bumper crop of immigrants (BW-Jul.29'50,p80). Hydroelectric power output will get a boost from Big Eidon, too.

easier for Britain to make a major effort at rearmament than for France.

Aside from Britain and France, Germany and Italy have the potential to play the biggest roles in Western Europe's rearmament. But as ex-enemy nations, both are limited as to their armed forces and their output of war materials. Here are some of the problems each of these countries has to face:

IV. Britain Is Ready

The British government is in a better position than any in Western Europe to rearm. The British people are prepared psychologically, and Britain's industrial plant is in relatively good shape. But the Labor government won't sacrifice its domestic program or its export drive if it can help it.

So far, there's no thought of directing labor or requisitioning factories. Unless present plans are changed, informal government contacts with industry (retained from World War II) will be the chief means of insuring priorities

of arms production.

Still, even in Britain, there are sure to be problems. A shortage of steel sheet and tin plate is in the offing. Electric motors, short in the last war, will be scarce again soon.

V. France Fears Inflation

One of the biggest problems the French government faces is a financial one—a threatened budgetary deficit next year of several hundred billion francs. At present, it looks as if this deficit will have to be covered by recourse to the printing presses. The government doesn't feel that it can collect any more taxes or borrow on the public credit.

In the face of growing inflation, the French government today has a generally inflationary financial policy-relaxing credit controls, lowering tax flours, planning a big public housing program. At the same time, wages are being held down to a level that looks politically

dangerous.

• Resistance—Neutral observers in France wonder whether the country can actually carry out its plan to raise 15 new divisions over the next three years at a cost of two-trillion francs. With one in every five voters a Communist, it may be impossible even to raise the manpower, let alone produce the needed arms.

No one doubts that France has the technical resources and enough manpower to do the job. The question is whether the country has the will.

VI. Italy-Guns Bring Butter

Rearmament may mean both guns and butter for the Italian people. British and French industry can produce arms

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J. t. Spurs, Director-350 W, 42 St., N. Y. 18, N. Y. more efficiently and more cheaply, but civilian needs will have to be cut to do it. But Italy's large labor reserve and its idle plant capacity mean that rearmament will actually bring work and higher living standards for Italy's unemployed.

• Budget-The main problem facing the DeGasperi government is finance, Rearmament will lead to a huge government deficit. This added to the threat of inflation might quickly produce political unrest. To avoid political trouble, Italy must carry through public works projects such as land reclamation, irrigation, and power development. And this will require continued American aid.

Of course, before Italy can join fully in Western Europe's rearmament, there will have to be a revision of the Italian peace treaty. But even under present treaty terms, the country is permitted to produce transport equipment, spare parts, and component parts of weapons for other countries.

VII. German Problems

An early peace treaty with West Germany (BW-Sep.2'50,p83) will probably clear the decks for German participation in European rearmament. Probably at first Germany's role would be as a supplier of western military needs.

But West Germany has two big hurdles to jump before it can gear itself even for this job:

• The severe housing shortage keeps labor immobile. One small Ruhr textile center alone could now employ 12,000 additional workers if housing were available. And this situation is typical throughout West Germany.

. The lack of capital in key industries and public utilities is holding back German industry. Germany's steel industry needs an estimated 500-million marks investment to bring capacity up to 15-million tons in the next two years.

As things look now, West Germany is best suited to supply auxiliary equipment. The German optical industry could be used for making range-finding equipment; auto plants could build vehicles and gun carriages; electrical plants could turn out communications equipment, etc.

But all this production will have to be paid for. And that is sure to strain relations between Bonn and the occupying powers. The Bonn government claims that the West Germans are now carrying a maximum tax burden consistent with a sound economy.

Bonn also points to the 4.5-billion marks spent last year on occupation costs. That meant that 7% of the national income was already going for military purposes. And they claim that of all the Western European nations only Britain spent more.

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Big doings in Mexico: The Export-Import Bank granted the Mexican govern-ment a \$150-million loan. Mexican President Aleman says the money will go for transport, communication, irrigation, power development.

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Tito's treasury will get desperately needed help from the U.S. The Export-Import Bank will lend Yugoslavia \$15-million, bringing its total investment in Tito to \$55-million (BW-Aug.12'50,p105).



Globetrotting Furs

These Russian furs are being stowed in a British warehouse after an unhappy round trip to New York; they got the bum's rush from New York stevedores who refused to handle Soviet goods. There's a lot of Communist crabmeat lying around, too, waiting until someone decides what to do with it. London housewives have indicated that they'll have none of the stuff. Meantime, in the U.S., President Truman asked longshoremen to stop making foreign policy by refusing to unload Russian cargoes. The President said that he would take care of the matter when and if he considered it necessary.

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Mr. Snyder and Mr. McCabe

Washington's two top money men can't agree on what to do about inflation.

The policy break between Secretary of the Treasury Snyder and Federal Reserve Board Chairman McCabe came over what seems just a technical matter—the terms of the Treasury's \$13.5-billion autumn refunding operation (BW—Aug.26'50,p25). But behind this wide-open split is a big, heavy question: How urgently is a strong credit policy needed in the fight on inflation?

On Aug. 18, policy-making Reserve officials conferred on that issue in Washington. Their economic indicators confirmed their fears: Prices of basic commodities were up 17% in the six weeks from the end of June to mid-August. Bank credit was ballooning.

Two decisions were taken to put the brakes on credit: (1) The discount rate was raised, thus making it more expensive for banks to borrow new reserves at the Federal; and (2) higher short-term interest rates were agreed on by lowering the market support prices on short-term government securities.

These Federal Reserve decisions preceded, but their publication followed by an hour, an announcement by Secretary Snyder that disputed the system's whole position. The Secretary said he would offer in exchange for maturing bonds and certificates only a 13-month note at a low 14%. His decision clearly meant he didn't think it necessary to use the refunding operation to fight inflation.

FRB Is in the Right

The issues posed by this break are many and technical, but one thing is clear: The Federal Reserve System is plainly right. The Treasury made a mistake.

The President himself has stated that the way to fight inflation in this "10% war" period is to crack down on excessive spending by higher taxes and tighter credit.

In moving to tighten credit, the Reserve System is trying to carry out Truman's prescription for inflation control. In refunding a huge batch of maturities with a short-term, low-coupon security that will have to be taken up by the Federal Reserve banks if it isn't going to flop, the Treasury is out of step with White House doctrine.

The Treasury's case seems to rest on the belief that higher short-term interest rates can do nothing but boost the interest cost of the public debt.

Too much is often claimed for higher interest rates as a business damper. But in our present situation, no doubt some would-be borrowers will be deterred by costlier and scarcer credit. It is not a question of going to a rate that will stop all borrowing and bring the economy to a disastrous standstill. Higher short-term rates will also help keep banks and other lenders from turning in their securities to the Federal for cash to make private, higher-yielding loans.

There is certainly enough in the Federal Reserve's case for firmer money rates to justify trying it. The innate caution of the system is a guarantee that the policy will not be pushed to absurd lengths.

The Treasury's consuming passion for keeping down interest costs on the debt is admirable—but cheap interest is not the only fiscal virtue. One that ranks higher is maintaining the value of the dollar against the erosion of inflation. The Treasury's position, pressed to the extreme, would seem to call for interest-free borrowing from the Federal Reserve banks. Then someone else would have to worry about dealing with the elephantiasis of the money supply that would result.

In fact, there seems to be some of that let-the-otherfellow-clean-up-the-mess philosophy in the Treasury's position. For if it persists in financing on terms that do not reflect market realities, it can only do so through the banks—ultimately the Federal Reserve banks. This means credit expansion and more pressure on prices.

Phony Solution

Perhaps the Treasury has in mind an escape from this dilemma via direct controls on prices. This is a phony solution. Direct controls may be useful, but they do not prevent inflation—they merely suppress it until a later time. We saw that after World War II.

Nor will credit controls in specific areas—such as consumer and real estate mortgage credit—pull us out of the hole. They will help. But heavy spending is so widespread in markets generally that selective controls alone can't do the whole job.

The Treasury's policy will also force higher legal bank reserves, and likely will require a reopening of the knotty question of extending them to all banks—whether members of the Reserve System or not.

All this, the Treasury is seemingly willing to force on the country in order that it may hold down the interest cost of the public debt.

Responsibility, it is said, makes cowards of us all. Perhaps others would think like him if they sat in Secretary Snyder's chair. But fortunately, the Federal Reserve System was set up "in, but not of" the government. There needn't be any concern that it will not discharge its obligations to support Treasury financing. But it has no responsibility to indulge in modern-day greenbackism to support a wrong Treasury financing decision. It should not be bound by the Treasury on credit matters for which it has a legislative mandate. Our system of checks and balances is designed to prevent the Big Mistake.

Last spring in Congress, the Douglas subcommittee looked into the long-standing Treasury-Reserve controversy. It ended up by saying that the Reserve System should be its own boss in credit matters. It is high time Congress made that official.



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RIGHT: Power for Morecocha is produced by this hydraulic generator at Cachachaea. Nearly all the electrical equipment here, as well as the mining machinery at Morococha, is American made.







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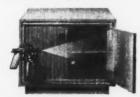
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